# The Palgrave Handbook of International Trade and Development in Africa

*Edited by*
Matthew Kofi Ocran
Joshua Yindenaba Abor

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Editors

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ISBN 978-3-031-65714-6 ISBN 978-3-031-65715-3 (eBook)
https://doi.org/10.1007/978-3-031-65715-3

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

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PART I

# Overview

CHAPTER 1

# Introduction to International Trade and Development in Africa

*Matthew Kofi Ocran and Joshua Yindenaba Abor*

## 1.1 Introduction

The exchange of goods and services has been at the core of the economic life of mankind since time immemorial. Trade and economic development have always been intertwined. The medieval economic history of Africa, Europe, and elsewhere provides ample evidence of the incidence of trade between peoples even when separated by formidable geographical barriers. International trade in commodities such as salt, copper, and gold between medieval West African empires such as Ghana, Mali, and later the Songhay and the Berber polities across the Sahara Desert are well documented (Ocran, 2019b). The Portuguese and other Europeans traded with the coastal African states in all sorts of commodities and later slaves for centuries.

After the Middle Ages, when relative stability returned to Europe, especially between seventeenth and eighteenth centuries, many trade regulations were enacted by the colonial British Government and the other governments in Europe. Between 1651 and 1776 the British passed a raft of trade laws: the Navigation Act of 1651, Staple Act of 1663, the Plantation Duty Act of 1673,

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_1

Hat Act of 1732, and the Molasses Act of 1733 (Ocran, 2019c). These laws were part and parcel of mercantilist trade paradigm that informed trade policy at the time. The infamous transatlantic triangular trade[1] between 1451 and 1830 is a classic example of how trade brought so much wealth and economic development to a section of the world at the detriment of Africa. Clearly, the historical antecedents of the link between trade and economic development are not in doubt.

Despite the attainment of independence in the 1960s many African countries export the same commodities that defined their pre-colonial trade with the rest of the world. During the colonial times, African countries exported unprocessed primary commodities: agricultural raw materials, food, and beverages. The other exports were minerals, metals, and later crude oil. Six decades on, African countries largely depend on these same primary commodity exports for most of their foreign exchange and income. Consequently, African countries have been unable to structurally transform their economies from primary-commodity-dependent, with their surplus labour, to modern industrialized economies and with quality jobs.

When the Organisation of African Union (OAU), the forerunner of the African Union, was formed in 1963, the founding fathers imagined a future when countries will remove all barriers to trade to foster economic development. On 12 January 2021, nearly six decades after the formation of the OAU, the countries signed the African Continental Free Trade Area (AfCFTA) agreement. AfCFTA is a continental free zone area compromising 55 countries and 8 sub-regional trading blocs. The trade agreement covers 1.3 billion people with a GDP of USD 3.4 trillion. As of January 2022, 44 countries had signed the agreement and their parliaments have accordingly ratified the same. AfCFTA covers tariffs, rules of origin, services, customs, standards, and conformity assessment rules. The other areas of agreement are sanitary and phytosanitary regulations, investment, competition issues, intellectual property rights, and e-commerce. For the first time in two generations many governments on the continent are seized with the urgency to hasten to address the issue of trade with great vigour.

Africa's marginal role in international trade is concerning. With a global population share of 16.7% and 2.9% of global GDP, the continent's trade account for only 2.1% of global trade (World Bank, 2020a). In 2007, Africa's share of global trade was estimated at 2.9% (World Bank 2020b). The continent's share of global trade has been stagnant for years. Africa has been unable to take advantage of globalization and global value chains to increase its share of trade.

From the 2000s, globalization assumed greater significance in international trade but over the past few years there has been a backlash from various

[1]The trade was concerned with the transport of slaves from Africa for sale to producers in the Americas, the export of raw materials from the Americas to Europe, and the movement of manufactured goods to Africa.

sections of the population in the Global North. This occasioned the formal exit of the United Kingdom from the European Union in January 2020, four years after the country voted in a referendum to leave the Union after joining its predecessor, the European Communities in 1973. In other countries there have been efforts to institute mercantilist trade regulations. Geopolitical tensions between the leading economies of the world also constitute a threat to globalization. There are references to the risk of uncoupling hitherto value chains that linked western countries and China, for example. These challenges notwithstanding, global value chains (GVCs), a product of globalization, continue to constitute more than half of global trade. The importance of global value chains, which involves a fragmentation of production processes associated with most final goods and services traded worldwide, remains significant despite the current challenges.

## 1.2 The Future of International Trade

Predictions about the future are always fraught with uncertainty. Nonetheless we can make an estimate of future outcomes following notable trends. But before we go any further we must characterize the key features of current world trade. Petersen and Steiner (2019) provide an interesting framework that describes factors that have shaped international trade until now. The authors argue division of labour has, to a large extent, determined the gains of international trade. At the international level, division of labour is determined by three important and broad factors. These are resource endowment, technological change, political and legal frameworks. We can look at each of these overarching themes in turn. First, resource endowment, whether it's labour, land-natural resources, or capital-technology, these endowments afford a country a measure of competitive advantage. The abundance of any given factor of production confers on a country some comparative advantage. This is because factor abundance drives down factor price. Lower factor price relative to the price in competing countries gives trading advantage. The comparative advantage of factor endowment is indeed advantageous in international trade. The second cog in international division of labour is associated with technological change. Technological advancement enables a country that is constrained in one production factor or the other to innovate to ease a constraint.

Countries with labour shortages have often come up with labour saving technologies. Digitization and automation have been used extensively to address the challenge of labour shortages, particularly in countries with labour shortages. This phenomenon is seen in many sectors in the developed economies. Agriculture and manufacturing are some of the sectors where automation has been used extensively. The last pillar of the ecosystem driving international division of labour is political and regulatory framework. There is ample evidence to show that international trade does not only depend on cost competitiveness but also on the legal and regulatory regimes within which trading is conducted. After nearly five decades of General Agreement on Tariffs and

Trade (GATT), which sought to reduce trade barriers and to promote international trade among countries, the World Trade Organisation (WTO) Agreement replaced the GATT in 1995. Unlike the GATT, which governed just goods, the WTO Agreement covers services and intellectual property as well. The WTO also has a more proactive and faster dispute resolution mechanism even though this can be improved further.

Over the past three decades, especially following the accession of China to the WTO, international trade has boomed and globalization was grown in leaps and bounds. At the same time there have been many regional free trade agreements across the world. These regional agreements have in no small measure eased trade and increased the gains of trade of the member states to the agreements. Increased adoption of trade liberalization policies and reduction of capital controls have stimulated the flow of trade and deployment of capital to support production of goods for international trade. The greater adoption of flexible exchange rate regimes across the world has assisted the conduct of international trade significantly. Political and legal frameworks that accommodate the free movement of labour across borders, such as the case of the Schengen area arrangement within the European Union (EU), have equally been supportive of cross-border trade. In Africa, the Economic Community of West Africa (ECOWAS) and the East African Community are regional communities that have had the free movement of people across borders for many years. For example, the 16-member ECOWAS block of countries abolished visa and entry requirements for a 90-day stay of citizens of member countries. First, promulgated in 1975, by 1984 all 16 countries were implementing the 90-day stay protocol (Adepoju et al., 2010).

Due to the rising backlash against globalization, the future of international trade is bound to change (Walter, 2021). While the change in the conduct of international trade is inevitable, the core tenets will mostly endure. But first, what are the predictions regarding the future of international trade?

The move to a multipolar world due to emergence of large economies in the Global South suggests that current rules of international trade, which have been shaped by the rich Global North and which protect the interest of rich countries, will be contested in the future. In parallel, the importance of regional trade agreements will increase to safeguard the interests of member countries and foster greater intra-regional trade. The number of deep trade agreements[2] is on the ascendency. Trade agreements have increased from 50 in 1990 to 270 by 2017 (World Bank, 2018). The new phase of regional trade agreements shows an increase in the number of policy areas that they cover. Some of the policy areas that affect trade and investment in goods and services, which are being covered in regional trade agreements, include behind-the-border regulations. Examples of these regulations are those that affect intellectual property

[2] Deep agreements refer to trade agreements that cover a wide range of policy areas, at the border and behind the border. On the other hand, shallow agreements cover tariffs and other border measures.

rights, government procurement rules, and competition policy. Some of the leading Regional Trade Area agreements include APEC (Asia Pacific-Economic Cooperation), EU (European Union), and the North American Free Trade (NAFTA). Africa's new Continental Free Trade Agreement is also worthy of note.

After many years of integration of China into the international trading system led by the Western countries which ushered the world into a new phase of globalization the relationship has frayed. While a complete decoupling is not imminent, there are signs that trade relations between China and the West are unravelling. For example, the share of imports from China as a share of total US imports has fallen from a peak of 22% in 2018 to 14% by August 2023, according to the *Wall Street Journal* quoting from the US Census Bureau's database. Similarly, the ratio of China's overseas investment that went to the US and Europe has fallen sharply over the same period. Chinese investment in the US fell by 4 percentage points and in Europe a fall of more than 12% was recorded. But Chinese investments in the developing world recorded increases. Africa saw an increase of 12%, East Asia and Latin America 8% each, and for the Middle East more than 3%. Foreign direct investment (FDI) into China from the rich world has also fallen sharply. The figures for the four quarters through to June 2023 provide evidence that indicates a fall of 78% as compared to the year before.

The ongoing challenges associated with the discord between China and the West have generated many buzzwords to characterize the threats to globalization. As reported in UNCTAD's flagship World Trade Report for 2023, there is now a new word list that characterize strategies to reduce globalization. The lexicon includes words such as *fragmentation, deglobalization, slowbalisation, reshoring, nearshoring, friendshoring, de-risking, decoupling, open strategic autonomy,* and *new industrial policy* (UNCTAD, 2023b). Data for 12-month rolling exports and imports for China shows the country is re-directing its trade towards the developing world. Latin America, Africa, and the Middle East now represent 36% of China's international trade surpassing the value of trade with the rich world: the combined value for the US, Europe, and Japan is 33% (Douglas & Fairless, 2023). The fissure in China-US trade relations may create opportunities for Africa as new Chinese investments are directed away from the West and as China seeks to build new production facilities overseas to enable it access Western markets. It is evident that the nature of international trade in the coming decades will not be the same as in the past two decades.

There may be challenges, but there may be new opportunities as well. Opportunities from a possible restructuring of global supply chains as a result of the dispute between the major two economies of the world may create opportunities. Africa must position itself by leveraging on the development of regional value chains drawing the opportunities offered by the AfCFTA agreement to participate at higher levels of Global Value Chains. It is important to learn from history and note that the development of South Korea and Taiwan

in the 1960s was in part due to the favourable terms of trade and support they enjoyed from the US in the middle of the Cold War (Ocran, 2019a).

Countries in Africa, like most in the Global South, may be required to take sides in the contestation between China and the West if the situation deteriorates badly. The resurgence of protectionism and the adoption of industrial policies by developed countries could disadvantage Africa. For example, the US's Inflation Protection Policy framework may thwart Africa's drive towards industrialization and transformation (UNCTAD, 2023a).

## 1.3 Purpose of the Book

This book is targeted at academics, students, and policy makers in the field of development economics, international trade, and trade finance. The major strong point of the book is that the contributors are largely African academics on the continent and in overseas and others with keen interest in Africa's trade and development. All the discussions are undertaken in the context of the new free trade area agreement, African Continental Free Trade Agreement (AfCFTA).

## 1.4 Overview of the Chapters

This book explores various aspects of international trade and how these aspects relate to Africa's development agenda. International trade is an intricate set of activities that needs many support systems. The support systems are complex. They range from finance, rules, and regulations to network infrastructure. The institutions and entities that govern the international trade system are often based in the rich Global North. Trade has been a source of wealth for many countries, especially those in the developed world. The literature suggests that international trade determines economic growth and development. Africa has had a marginal role in international trade since the 1960s. The continent has not benefited as much from international trade as the developed countries.

The 25 chapters of the book are in five parts. Part I gives an overview of the book. It also provides a reflection on the future of international trade and development in Africa. We discuss many broad governing issues in Part II. Trade finance and payment systems are the subject of Part III. The book examines the relationship between trade and economic performance in Part IV. The last set of chapters, Part V, discusses many emerging issues associated with international trade. Each chapter of the book provides a review of the relevant stylized facts. It also examines the theoretical imperatives associated with the theme. The chapters also review the related evidence and then provide policy proposals.

### *1.4.1 Part II: General Background and Governing Issues*

Chapter 2 begins with an analysis of Africa's new landscape for doing business in the context of the AfCFTA. The authors, Joshua Yindenaba Abor, Jephthah Osei, and Oluranti Doherty, then discuss the potential benefits of the AfCFTA. They assess issues around the promotion of economic growth, industrialization, improving infrastructure and the strengthening of regional integration and cooperation. They also look at efforts aimed at boosting intra-African trade, growth of small and medium enterprises, improving formal trading by African women, and achieving Agenda 2030 of the Sustainable Development Goals (SDGs). The chapter identifies key challenges African countries must address to realize the potential benefits of the AfCFTA agreement. Some of the areas that they highlight are loss of revenue, high adjustment cost, intense competition, theft of intellectual property, and wide variation in the levels of development. Considering the potential that the AfCFTA is projected to provide for Africa, the authors suggest, member nations need to prioritize the AfCFTA in their trade and foreign policies. In conclusion, the authors suggest doing business in Africa will depend largely on the successful implementation of the AfCFTA and other initiatives aimed at promoting economic integration and growth on the continent.

James Abugre, Joe Nellis, and David Ofosu-Dorte discuss the impact of political and legal environments on international trade in Chap. 3. They provide an overview of the emerging political and legal environments in Africa. James, Joe, and Ofosu-Dorte then discuss how the political as well as the legal environments and policy trends impact international trade of African countries. The authors suggest among others political environment of international trade is characterized by the interplay of various factors, including government policies, political stability, and relations between countries. They argue trade policies and regulations are influenced by political ideologies, national interests, and geopolitical considerations and can be shaped by factors such as elections, political crises, and changes in leadership. The chapter concludes that international trade laws and agreements, such as those established by the WTO and bilateral agreements, provide a framework for regulating trade between countries, protecting intellectual property rights, and resolving disputes.

Priscilla Baffour examines trade and the labour markets in Africa, in Chap. 4, by analysing existing data to establish historical trends and explore options for African countries to harness opportunities of trade through increased diversification, productivity, and development of value chains. Her findings point to the fact that unemployment remains high, particularly among young people with advanced education; in Africa relative to other regional blocs in the world as a result AfCFTA offers a great opportunity to create jobs, improve labour market conditions, and spur growth in member countries. Consequently, Priscilla suggests countries must adopt inclusive growth policies to reduce the potential adverse distributional and labour market effects of increased trade. Among the policies recommended by the author is one that aims to improve

flexibility of markets by easing restrictions to facilitate labour reallocation across sectors while moderating distortions in labour cost to enable seamless transitions. Lastly, the author highlights the importance of investment in education, skills training, and retraining to enable the labour force to utilize opportunities associated with trade.

In Chap. 5, Anthony Kyereboah-Coleman, Raymond K. Boumbouya, Mercy Marimo, and Nazih Latif consider African Trade with a focus on its composition and structure. It looked at African trade pre- and post-colonial, intra-African trade, and the promise that AfCFTA brings. African trade is now more essential than ever given the impact of COVID-19 and the Russian-Ukraine war on supplies to the continent. Intra-African trade will reduce dependence on foreign commodity supplies and lessen the potential impact of external shocks on the continent. AfCFTA presents a greater chance to lift many out of poverty. The authors admonish policy makers, including both domestic and external, including the African Union, Economic Commission for Africa, World Trade Organization and UNCTAD to support AfCFTA to succeed given that it is one of the pillars of Agenda 2063, Africa's long-term plan for sustainable development, industrialization, and structural transformation.

Energy and International Trade in Africa is the focus of Chap. 6. In this chapter, Jabir Mohammed and Amin Karimu examine the role of energy in the promotion of international trade outcomes on the continent. The chapter concentrates on renewable and non-renewal energy capital investments in Africa. It highlights the energy security situation in Africa and its relationship with international trade. The chapter similarly throws light on energy demand and the balance of payment situation in Africa. Finally, it explores the mechanism of energy war in Africa and provides the channels through which this can be addressed. In the end, the authors draw lessons from the analysis and provide policy direction to improve energy trade and security in Africa.

### *1.4.2 Part III: Trade Finance and Payment Systems*

Chapter 7 looks at exchange rate policy options for Africa against the backdrop of the AfCFTA. The authors, Eman Moustafa and Amira El-Shal, discuss the AU's effort at creating an African Monetary Union (AMU) under the Abuja treaty in 1991 following the success of the EU monetary union which had brought prosperity and development to its members. Eman and El-Shal point out the dream of an integrated Africa for a possible AMU must begin with the first step of a unified African Exchange Rate Mechanism (AERM). The adoption of an AERM, they argue, would allow for a smooth transition among African countries to a single-currency regime and to be followed by monetary union. The chapter maintains an AERM is a key enabler for growth of the AfCFTA. Eman and El-Shal then provide evidence on the relevance of AERM and then tackle the most prominent challenge of how Africa could develop a

plan to initiate an AERM given the structural differences between its economies and the low intra-trade rate.

The dynamics of international trade finance is presented in Chap. 8 by Joshua Yindenaba Abor, Isaac Bekoe, and Mabouba Diagne. The chapter provides an overview of the trade finance dynamics in Africa, and the various payment methods in international trade, which include open accounts, prepayment, documentary collections, letters of credit, drafts, and counter-trade. The authors review a suite of international trade finance instruments. The chapter offers interesting insights on the financing schemes used in driving Africa's export trade and highlights the roles of key regional and multilateral institutions that facilitate international trade in Africa.

In Chap. 9, Joshua Yindenaba Abor, Kanayo Awani, and Daniel Asante-Amponsah analyse the economics of structured trade finance in Africa. They start the analysis with a discussion on the evolution of structured trade finance. The chapter then explains what structured trade finance is, identifies the types of structured trade finance products, and shows how structured trade finance differs from conventional finance. It discusses the various structured trade finance instruments. It considers the benefits of using structured trade finance and the challenges associated with it. The chapter also illustrates Africa's experiences in structured trade finance and indicates the conditions for enhancing the use of structured trade finance in Africa.

George Donkor, Joseph Asenso, Sydney Vanderpuye, and Pagnamam Yekpa look at development finance institutions (DFIs) and trade promotion in Africa in Chap. 10. They review the different types of DFIs, from bilateral, regional, to multilateral DFIs, and explore the value addition that DFIs have introduced to promote trade. The authors discuss the interventions of DFIs in trade promotion. Some of the interventions highlighted by the chapter include the use of long- and short-term financing, direct and indirect debt, equity, guarantees, grants, innovative financing, trade finance and project finance, as well as providing advisory services and technical assistance to their clients.

Chapter 11 considers the payment and settlement systems and the AfCFTA. The authors, Matthew Ocran, Joshua Yindenaba Abor, Daniel Ofori-Sasu, and Doreen Nambafu, examine the various payment system platforms in Africa. They examine the geographical scope and market segment. Under geographical scope they assess regional and global platforms. And under market segment, the authors assess whether a platform is aimed at wholesale or retail customers. The key finding is that payment systems' overlap on the continent is analogous to the overlap observed across regional economic institutions. This is a bane of economic integration in Africa. The authors argue that effective and efficient continental payment system can increase cross-border trade and assist in the realization of the ideals of the AfCFTA.

In Chap. 12, Vivienne Lawack and Sia Mziray examine the challenges to the main models of cross-border payments and investigate how central bank digital currencies (CBDCs) can enhance cross-border payments in Africa to enhance intra-African trade. Lawack and Mziray review the South Africa's National

Payment System (NPS), the Southern African Development Real-Time Gross Settlement System (SADC-RTGS), and the Pan-African Payment and Settlement System (PAPSS). The authors also review three models that can be considered for the adoption of CBDCs for cross-border payment systems. The findings suggest that unified system model is the better alternative for the SADC region and recommend policies to ensure seamless integration of CBDCs into the SADC-RTGS system.

### *1.4.3 Part IV: Trade and Economic Performance*

In Chap. 13, Ebo Turkson discusses the gains of trade that can inure to the benefit of African countries following the coming into effect of the AfCFTA. It discusses the AfCFTA and its potential benefits for state parties. Among the benefits of AfCFTA agreement that Turkson identifies are welfare implications of lower prices for consumers, expanded markets for producers through tariffs reductions, and the removal of nontariff barriers (NTBs). He however suggests that African countries have to invest in the needed infrastructure to ensure that the full benefits of the trade agreement are realized.

In Chap. 14, Peter Quartey, Lakshmy Subramanian, and Daniel Osarfo analyse the linkage between different trade liberalization indicators—(i) tariffs, (ii) adjusted trade ratios, and (iii) real effective exchange rates—on economic growth in the six World Bank regions. They further discuss how trade barriers have reduced substantially across most countries and regional blocs, contributing to economic resilience and growth. In addition to providing recent evidence, Quartey, Subramanian, and Osarfo explain how different liberalization instruments work better or otherwise in different regions.

In Chap. 15, Federico Foders investigates the viability of services-led development option for Africa. First, the author gives an overview of global and African services trade including digital services. He then discusses issues in productivity, employment, and the comparative advantage of services in relation to technical progress. Finally, Foders explores the idea that digital services trade could open a window of opportunity for African economies is against the background of received development strategies and initiatives to accelerate intra-African services trade liberalization.

In Chap. 16, Matthew Ocran examines the role of commodity exports in Africa's quest for structural transformation. He reviewed the theoretical and empirical literature on structural transformation to foreground discussions on prospects for industrialization and structural transformation in drawing Africa. The findings suggest global value chain (GVC) participation holds great promise for structural transformation, especially given its ability to foster industrialization, technology transfer, foreign direct investment, and employment creation. But GVC participation also requires that in addition to the deepening of trade agreements in the region the necessary value chain ecosystem is created. The necessary business supporting environments such as infrastructure, government services, business, information and technology services, and

educated labour force have to be created to support the transition to higher GVC participation. Through the participation in higher levels of GVCs Africa can add value to its exports, provide jobs to its youth, and in the process help transform the economies structurally.

Lordina Amoah and Victor Murinde, in Chap. 17, examine the mechanisms through which financial development impacts international trade, the trends in financial development and trade. The authors also assess the potential benefits of liberalizing the financial and trade sectors. They concede that the literature on the impact of financial development on trade outcomes is divided. Nonetheless, Amoah and Murinde argue African economies must consider measures that foster the development of the financial sector. The argument is based on the view that well-developed financial sector will reduce cost and increase access to finance by domestic enterprises which in turn will reduce the cost of trade. Amoah and Murinde further assert that increased trade will lead to economic expansion.

### *1.4.4 Part V: Emerging Issues*

In Chap. 18, Elikplimi Agbloyor, Joseph Nyeadi, Pieter Opperman, and Boakye Dankwah provide an understanding of FDI and Trade relationships drawing on the empirical and theoretical literature as well as the experience of African countries. The authors discuss the drivers behind the remarkable growth of FDI and trade in Africa. They explain the effects FDI and trade have had on Africa's economic growth and development, social, and environmental development. The empirical evidence provided reinforces the FDI-trade discussion in Africa, offering valuable insights into real-world dynamics. The authors provide insightful analysis that serves as a foundational resource for comprehending the dynamics of FDI and international trade in Africa.

Gloria Dzeha, Joshua Yindenaba Abor, and Robert Lensink, in Chap. 19, provide an overview of remittances and their importance to Africa. They discuss the importance of international trade and examine the link between remittances and international trade and how both affect African economies. Dzeha, Abor, and Lensink argue the literature is unanimous regarding the impact of remittances on trade or vice versa. A section of the empirical literature provides evidence of positive relationship, while the other shows a negative effect. Remittances increase inflow of foreign exchange. Behold a certain threshold, remittances could lead currency appreciation, making a recipient country's exports uncompetitive. Uncompetitive exports have implication for a country's balance of trade accounts as well as employment outcomes. The authors admonish policy makers to be mindful of the effect of remittances on trade and economic growth and to design policies to pre-empt the negative impact of remittances while at the same time encouraging the flow if there is scope for increased flow.

Gender and Trade is the subject of Chap. 20. The authors, Maame Fosu, Vera Songwe, and Joshua Yindenaba Abor, examine the impacts of trade and

trade policies on women and how this provides policy direction on how trade can support women and address the gender inequality gap. The authors suggest there have been some gains in the gender-inclusive trade and development; however, the COVID-19 pandemic and the Russian invasion of Ukraine have eroded some of these gains and highlighted some vulnerabilities that women are more prone to. The authors note the changes in global value chains such as digitization of international trade have created more trading opportunities at lower cost. As a result, many women have lost their jobs and some have resorted to non-paying jobs or had quit the labour market to take care of the home. The authors suggest women must be equipped with skills to enable them shift to other sectors of the economy during crises. Lastly, the chapter advocates for the need to promote trade and gender equality through appropriate policies and transparent trade.

Gordon Abekah-Nkrumah, Patience Aseweh Abor, and Edwin Atitsogbui investigate the impact of the health crisis on the global economy and how the pandemic affected export, especially in the agricultural sector in Chap. 21. They also examine the long-term impact of the COVID-19 on trade, the comparison of the impact of previous pandemics on trade, and the effect of the pandemic on foreign direct investment. Abekah-Nkrumah, Abor, and Atitsogbui found COVID-19 pandemic disrupted trade, supply chains, and demand patterns, with far-reaching and diverse effects on the global economy. Although agricultural exports in some countries encountered many difficulties, global agricultural exports remained resilient during the peak of the pandemic. The pandemic also had a substantial impact on foreign direct investment. The authors suggest COVID-19 had a significant and long-lasting impact on trade and the global economy compared to previous pandemics. The authors argue policymakers should emphasize diversification and regionalization and ensure faster adoption of digital technologies to mitigate the possible long-term effects of pandemics on trade.

In Chap. 22, Daniel Ofori-Sasu, Emmanuel N'guessan, and Lwanga Nanziri explore the landscape of e-commerce and digital trade in Africa, delving into the opportunities it presents, the challenges it faces, and the strategies required to leverage its full potential. They explore the various aspects of e-commerce and digital trade and their impact on Africa's economies and societies. By examining the trends, benefits, and challenges associated with e-commerce and digital trade in Africa, Ofori-Sasu, N'guessan, and Nanziri provide insights into the transformation of digital technologies and their role in driving economic development, entrepreneurship, and fostering inclusive growth. The work of the authors reveals that the evolution and trends of e-commerce and digital technologies show the extent to which the use of these technologies can foster a country's participation in international trade and development. Lastly, they provide lessons for policy implication, particularly the strategies for achieving effective and efficient digitalization of international trade in Africa.

In Chap. 23, Matthew Ocran examines the theory and evidence concerning how infrastructure development facilitates market connectivity and trade.

Ocran assesses connectivity in the form of transportation: roads, rail, air, and sea, information and communication technologies. He also looks at economic and social infrastructure such as electricity and water production and supply. The author systematically reviews the continent's infrastructure gap. The key findings suggest considerable infrastructure deficit in all areas. The only bright spot is in the area of mobile telephony. Ocran underscores the fact that no African government can raise the needed resources to fund the infrastructure deficit. Governments should rather take a cue from the success in the mobile telephony market where liberalization allowed the private sector to make a considerable impact. They must also provide financial and non-financial incentives to stimulate investment. Governments need to ensure that urban sprawls are minimized to bring down the cost of installation of physical infrastructure such as the distribution and reticulation of services like sewage, portable water, and electricity.

Paul Terna Gbahabo, Foluso Akinsola, and Gloria Afful-Mensah explore the context and conceptual issues surrounding cross-border trade in Africa in Chap. 24. They provide an in-depth understanding and empirical insights into the critical issues and policies necessary to improve trade facilitation in Africa. The authors explore the conceptual definition and measurement of trade facilitation, the cost and benefits, the theoretical framework, the stylized facts. Gbahabo, Akinsola, and Afful-Mensah assess WTO and AfCFTA Trade Facilitation Agreements towards the achievement of Agenda 2063 and Sustainable Development Goals (SDGs). The authors conclude with recommended policy reforms for efficient trade facilitation in Africa.

In Chap. 25, Angela Azumah Alu, Dennis Hehetror, and Joshua Yindenaba Abor examine trade mis-invoicing and transfer mispricing in Africa and suggest ways of curbing them. The chapter starts with an overview of illicit financial flows (IFFs) and then continues to present an overview of trade mis-invoicing and transfer mispricing. It goes on to describe the methods by which trade mis-invoicing and transfer mispricing are measured. The chapter also presents the situation in Africa's extractives, including a case of gold exports from Ghana, and outlines the effect of trade mis-invoicing and transfer mispricing on development. The chapter then suggests ways of curbing trade mis-invoicing and transfer mispricing and thereafter concludes.

## 1.5 Concluding Remarks

This chapter began with a brief discussion of the evolution of international trade and development and Africa's marginal role in international trade. The continent's long journey to the attainment of a continental free trade agreement is contextualized. The need to shift attention to participation in higher echelons of global value chains for economic development and structural transformation is emphasized. We then turn our attention to the future of international trade. And here we considered the key trends that have defined globalization and international trade in recent years. We also discussed the

threats to international trade occasioned by the recent geopolitical tensions between China and the Global North. We then provide highlights of the remaining chapters of the book.

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PART II

# General Background and Governing Issues

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CHAPTER 2

# Africa's New Landscape for Doing Business: The African Continental Free Trade Area

*Joshua Yindenaba Abor, Jephthah Owusu Osei, and Oluranti Doherty*

## 2.1 Introduction

African countries established various economic integration treaties in the region, notable among them include the Southern African Customs Union (SACU) in 1910 and the East African Community (EAC) formed in 1919. As of 2019, the continent had over 15 regional integration agreements in place, with various countries sharing membership. The primary motive of these associations is mostly to promote and improve intra-regional trade to foster economic growth and alleviate poverty. These integrations have significantly improved and extended intra-African trade for decades but have less than delivered what was initially envisaged. Irrespective of the benefits accrued, these intra-regional trade initiatives continue to be dominated by exports of primary

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_2

products (i.e. raw materials), which explains Sub-Saharan Africa's insignificant contribution to global value chains (GVCs). A plethora of reasons such as weak contemporary internal reorganisations to enhance domestic supply responses, and poor implementation of the integration due to lack of robust institutional support framework, have been identified as key contributors to the underperformance of the continent on the international market.

Recent decades have seen a resurgence in intra-regional trade in Africa largely spearheaded by Regional Economic Communities (RECs) such as the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC). These organisations have the greatest height of intra-union trade compared to other integrations in Africa. Although relatively low compared to other blocks such as Europe and Asia, it is as well dominated by food and some level of manufactured goods. For instance, about 17% of the aggregate trade volumes were transacted within the shores of the continent in 2017, representing a significant growth of 9% a decade earlier. In contrast, Sub-Saharan Africa (SSA)'s exports to the global economy, which accounted for 60% of its overall export volume, are made up of about 70% primary products. Meanwhile about 70% of imports into SSA are dominated by manufactured goods. This clearly shows that Africa conducts greater percentage of its trade outside the continent compared to other regions such as Asia and Europe that trade more than half within the continent.

This development necessitated the need for the African Union (AU) to launch the African Continental Free Trade Area (AfCFTA). The agreement, which came into force in 2021, has been recognised as a game-changer for its potential to defragment the regional economy and boost intra-African trade and productivity (Fofack, 2018; IMF, 2019; Oramah, 2021). The AfCFTA could lead to increasing market efficiency and reducing the cost of doing business, as firms take advantage of increasing economies of scale in order to spread the risk of investing in smaller markets across the continent. Also, the AfCFTA could ease investment flows and change the composition and direction of Foreign Direct Investment (FDI) so as to spur economic transformation and place the continent on a long-run growth path. For instance, a number of multinationals in the automotive industry recently set up new manufacturing plants or injected capital in supporting the expansion of processing capacities in Africa, which portends well for the change in the composition of FDI (WEF, 2021; Oramah, 2021).

In this chapter, we discuss the AfCFTA as Africa's new landscape for doing business. The rest of the chapter is structured as follows. Section 2.2 discusses Africa's trade problem; Sect. 2.3 provides an overview of the AfCFTA; Sect. 2.4 discusses the potential benefits of the AfCFTA; Sect. 2.5 identifies the potential challenges associated with implementing the AfCFTA; Sect. 2.6 examines the multifaceted roles of AfCFTA; Sect. 2.7 explores the broader impact of the AfCFTA; and finally, Sect. 2.8 concludes the chapter.

## 2.2 The Africa Trade Problem

The African region for years has lacked a continent-wide trading hub unlike other regions such as North America, Asia, and Europe. The South African market has for some time been operating as a hub for 14 trading partners in Africa. The remaining African countries have no systemic global trading hub that regulates both export and import activities from the rest of the continent. As a result, the continent's share of the global trade has stagnated hovering around 3 percent since 2008. Europe remains the dominant trading destination for Africa, although the trade volume has been declining recently but has seen a resurgence with that of Asia, particularly China.

In addition, non-tariff restrictions such as travel barriers within the continent pose a threat to intra-regional trade in Africa. Unlike Europe, Africans find it difficult travelling to neighbouring countries. For example, citizens of countries such as Nigeria, Senegal, and Democratic Republic of Congo require visas before travelling to South Africa. However, nations from countries outside the continent such as Australia and the United States are not obliged to secure a visa before visiting South Africa. These post-colonial borders continuously decline domestic trading among the continent's member states compared to trading with the rest of the world. For instance, from 2015 to 2017 intra-regional trade in natural resources for Africa stood at 33%, while exports to the rest of the world exceeded 50%. The persistent rise in the export of natural resources has inhibited diversity among African economies and prevented them from becoming more self-reliant. Other non-tariff trade barriers such as the infrastructural deficit, poor quality of ports, prohibitive air transportation cost, etc., contribute to the low level of trade in Africa.

Other barriers such as low-quality trade logistics affect intra-regional trade in Africa. According to the International Monetary Fund (IMF) regional outlook report 2019, cross-border trade from the continent saw a significant decline in terms of trading logistics on the international market. Also, in most of these African countries, there is inadequate human capital, poor access to credit, and non-availability of enabling business environment compared to other regions such as Europe and North America.

The trading regimes aimed at tackling the African trade conundrum were characterised as underperforming despite their roles in enhancing intra-regional trade on the continent in the past two decades. Some studies on intra-African trade pointed out some major factors contributing to the ineffectiveness of these trading regimes (see Yang & Gupta, 2005; Hailu, 2014; de Melo & Tsikata, 2015). These factors include:

1. Weak implementation of the agreements resulting from weak institutional support framework.
2. Numerous and overlying member formations both in the region and clusters of trade integration owing to complexities, law enforcement, and uncertainties. The long-run effect is poor trade liberalisation among individual member states than expected in the term of agreements.

3. Infrastructural bottlenecks leading to high cost of trade.
4. Lack of harmonising reforms to boost domestic supply reactions.
5. Low labour skills and member states corporation delaying economies of scale.

Apart from these factors there was also the failure of fair trade experiment. Fair trade was implemented to improve both the livelihood and social conditions not only for the farmer, but their communities as well. Fair trade Africa required the farmer to commit to some sustainable development practices such as avoiding child labour and the use of a mechanised method of farming, especially in the cocoa sector, so that the farmer sells the cocoa beans on fair trade terms in the global supply chain. However, empirical evidence showed that the experiment failed particularly in West Africa where cocoa is cultivated in large quantities (Ryan, 2011). Majority of the farmers earned the least share of the profit canvassed by fair trade along the descending order of the profit-sharing chain. The contribution to societal development has also been very poor with decisions taken at the top level without considering the actual struggles of farmers. It was some of these failed experiments and broader barriers discussed that the AfCFTA agreement was signed.

## 2.3 Overview of the African Continental Free Trade Area

The African Continental Free Trade Area (AfCFTA) is a historic agreement that seeks to create a single market for goods and services (African Union, 2021). After the World Trade Organisation (WTO), the AfCFTA is seen as the world's largest free trade area by member states. It is one of the African Union's main objectives. The AfCFTA represents a new landscape for doing business in Africa, offering opportunities for increased trade, investment, and integration (World Bank, 2020). In January 2012, the 18th Ordinary Session of the African Union's Assembly of Heads of State and Government met in Addis Ababa, Ethiopia, and decided to construct a Continental Free Trade Area by 2017. The goal was to improve economic integration and, in the long run, boost intra-African trade. The AfCFTA agreement was signed in March 2018 in Rwanda's city of Kigali. This was signed in conjunction with the Kigali Declaration and Protocol treaty and the African Economic Community responsible for economic and trade liberalisation. In total, 44 of the AU's 55 member states signed the AfCFTA's consolidated text, 47 signed the Kigali Declaration, and 30 signed the Protocol on Free Movement. As of August 2024, 54 of the 55 AU member states had signed the agreement except for Eritrea. The AfCFTA was set to be launched in January 2020 but due to the COVID-19 pandemic, this was postponed and on the 1st of January 2021, the AU opened the market under the AfCFTA, which allows for duty-free trading of goods and services among member countries. According to a report by the Ghanaian Daily Graphic in 2021, the initial shipments of traded products under the

AfCFTA, which included cosmetics and drinks from Ghana to South Africa, were shipped by 5 January 2021. The AfCFTA presents opportunities for Africans to address the problem of low intra-African trade and to stimulate trade among African countries.

According to the World Bank (2020), the AfCFTA trading agreement is estimated to cover a population of not less than 1.3 billion in the whole of Africa. As well, it is expected to raise a combined gross domestic product (GDP) of US$3.4 trillion and uplift not less than 30 million Africans from abject poverty. Experts believe that the AfCFTA has the potency of restoring Africa's economic promises, enhancing productivity, and stimulating higher investment. Considering the havoc that COVID-19 pandemic has wreaked on the global economy, the creation of the vast AfCFTA regional market is one major opportunity to improve foreign direct investment (FDI). The AfCFTA is expected to reduce tariffs among member countries and cover policy areas including trade facilitation and services, regulatory measures such as sanitary standards and technical barriers to trade. It will complement existing sub-regional economic communities and trade agreements in the region by providing an Africa-wide regulatory framework and by regulating policy areas (World Bank, 2020).

On the day of launch, Wankele Mene, the secretary-General of the AfCFTA secretariat posited that "*This is not just a trade agreement, this our hope for Africa to be lifted up from poverty.*" The AfCFTA is also expected to increase intra-African trade, enhance industrialisation, employment creation, and boost industrial competition for African industries on the world market. On average, 70% of ordinary African women are employed in the informal sector where there is little or no access to external trading. As a result, the new market is projected to empower African women by expanding their trade potential and talents on the global stage. The AfCFTA's main goals are to create a united continental market for goods and services with free movement of people and money, as well as to expedite the Customs Union's foundation. Its purpose is to boost intra-African trade by better harmonising and coordinating trade liberalisation, facilitation, and mechanisms across RECs and Africa as a whole. The African Union (AU) envisages the trade area to among others address concerns of multiple and overlapping membership and regional integration through enhanced production capacity, accessible markets, and resource reallocation to increase industrial competition. The AfCFTA is not only a commercial agreement; it is also a major intervention by the African Union designed to provide a platform for Africa to engage the world from a common viewpoint in order to exhibit "more self-assertion on the global stage." As a result, its slogan is "building one African Market."

### *2.3.1 Core Mandate of the AfCFTA*

The AfCFTA expands on the terms of the Tripartite Free Trade Area (TFTA), which includes the Southern African Development Community (SADC), the

Common Market for Eastern and Southern Africa (COMESA), and the East African Community (EAC). Article 3 of the modalities creating the trading area enshrines the AfCFTA's basic mandates. These mandates consist of eight strategic objectives and seven operational objectives.

### *2.3.2 Strategic Objectives of the AfCFTA*

The strategic objectives of the AfCFTA include:

1. Create a single market for goods and services that facilitate free movement of people across Africa.
2. Contribute to the movement of capital and smoothen investments.
3. Create a continental custom union.
4. Expand intra-African trade.
5. Resolve the challenges of overlapping members in regional economic arrangements.
6. Promote sustainable and all-inclusive growth and development.
7. Improve industrial development.
8. Boost competitiveness.

### *2.3.3 Operational Objectives of the AfCFTA*

The operational objectives of the AfCFTA include:

1. Progressive elimination of tariffs and non-tariff trade obstacles.
2. Progressive liberalisation of services trade.
3. Collaborate on investment, intellectual property, and competition policy concerns.
4. Participate in overall trade-related capacities.
5. Coordinate customs issues and trade facilitation measures.
6. Imposition of a process for resolving disputes, particularly those involving member rights and obligations.
7. Establish and maintain an institutional structure for the AfCFTA's implementation and administration.

## 2.4 Potential Socio-economic Benefits of the AfCFTA

The AfCFTA agreement has several potential benefits for Africa, including promoting economic growth, fostering industrialisation, improving infrastructure, strengthening regional integration and cooperation, boosting intra-African trade, growth of small and medium enterprises (SMEs), improving formal trading by African women, and achieving Agenda 2030 of the Sustainable Development Goals (SDGs).

*Promoting economic growth:* Increased trade and investment can lead to economic growth, job creation, and poverty reduction. By expanding the size of the African market, the AfCFTA can help attract foreign investment and increase economies of scale, making African goods and services more competitive globally. Promoting economic growth through the AfCFTA will improve job prospects for Africa's rapidly growing youth population.

*Fostering industrialisation:* The AfCFTA is expected to promote the development of regional value chains, where countries specialise in producing different components of a product. This can help promote industrialisation in Africa by encouraging the growth of manufacturing and other value-added activities.

*Improving infrastructure:* The AfCFTA requires the development of infrastructure, such as roads, rail, and ports, to facilitate the movement of goods and services across borders. This can help improve connectivity and reduce transportation costs, making African goods more competitive.

*Strengthening regional integration and cooperation:* The AfCFTA is seen as a stepping-stone towards deeper regional integration and cooperation in Africa. By reducing trade barriers and promoting trade and investment, the AfCFTA can help build trust and mutual understanding between African countries and pave the way for further regional cooperation in areas such as security, energy, and environmental protection.

*Boosting intra-African trade:* The implementation of the AfCFTA will boost intra-African trade by immediately removing all tariffs on 90% of goods. This is estimated by the United Nations Economic Commission for Africa (UNECA) to increase intra-African trade from the current 18% to 52.3% by 2022. Increased trade in higher-value industrial commodities will arise from the AfCFTA, which should assist African nations to diversify their exports and become more resilient to price volatility (Hammond, 2019).

*Growth of small and medium enterprises:* According to Cofelice (2018), the AfCFTA's biggest winners in the short term will be small and medium enterprises (SMEs), which currently account for 80% of all trading on the continent. Over time, it is expected that the benefits accrued will spread across the region resulting in a US$ 16.1 billion welfare gain, with women (who now dominate 70% of informal cross-border trade) and young people, who may benefit from new job opportunities. These firms often struggle to enter more advanced international markets, but with the AfCFTA, they will be well positioned to integrate into regional export destinations and will be able to use regional markets as stepping-stones for future expansion into worldwide markets (Akeyewale, 2018).

*Improving formal trading by African women:* The literature on the effects of the AfCFTA on households suggests that the effect is largely balanced between male- and female-headed households. The AfCFTA will remove barriers in the informal sector impeding female-trader (estimated to be 70% of the sector) participation and increase the balanced gender participation. This is possible because the trade area agreement will lower tariffs along the official trade

channels which also provide enough trading security for participants, especially women.

*Achieving Agenda 2030 of the Sustainable Development Goals:* The AfCFTA has the overall effect of assisting in the realisation of the United Nations 2030 Agenda, particularly the Sustainable Development Goals, which include targets for decent work and economic growth (Goal 8), industry promotion (Goal 9), food security (Goal 2), and affordable access to health services (Goal 3). Supporting African manufacturing and economic development is a win-win situation. However, the AfCFTA can assist the continent in becoming less reliant on outside resources. This would enable Africa to better fund its own development, as stipulated by Goal 17. Goal 1 is critical, as is upholding the commitment that "no one will be left behind… starting with the farthest behind first." Complementary measures, such as the African Union's Boosting intra-African Trade Action Plan, must be implemented by African governments, but the African private sector must also step up and invest in the AfCFTA's potential.

## 2.5 Potential Challenges Associated with the AfCFTA

The AfCFTA is largely recognised as a significant driver for Africa's economic growth, industrialisation, and long-term development. Despite the success, a number of potential challenges need to be addressed and these include loss of revenue, high adjustment cost, intense competition, theft of intellectual property, and wide variation in the levels of development.

*Loss of revenue:* Significant tariff revenue losses are feared, as is an unequal allocation of costs and benefits. The continent's integration may result in unequal cost and benefit-sharing, resulting in high adjustment costs, particularly for poorer countries, impeding their capacity to reap the full long-term benefits of the AfCFTA.

*High adjustment cost:* The benefit of trade liberalisation in the AfCFTA is largely accrued in the long run leading to high adjustment costs in the short run through the reallocation of labour, capital, and other factors of production.

*Intense competition:* Since there is no apparent distinction between the trade agreement's long- and short-run effects, market consolidation may occur when smaller firms are exposed to more intense rivalry. Production will almost probably move to areas where comparative advantage or home market effects make enterprises more efficient, putting small-scale producers in a difficult position. Furthermore, some permanent expenditures in physical and human capital will depreciate or become completely sunk costs (Chappelow, 2019).

*Theft of intellectual property:* Most African countries lack patents, inventions, and new process protection legislation. Laws are not strictly enforced by those who have them. As a result, many businesses have lost their business concepts. The AfCFTA's introduction is expected to exacerbate the situation. Small businesses may not be motivated to invest in research and development (Akeyewale, 2018).

*Wide variation in the levels of development:* There is a substantial discrepancy in income and development levels among African countries. For example, South Africa, Egypt, and Nigeria account for more than half of Africa's total GDP, while the continent's six independent island nations account for only 1%. According to Akeyewale (2018), the AfCFTA has the highest levels of wealth disparities among continental free trade agreements, more than twice those of other blocs such as the Association of Southeast Asian Nations (ASEAN) and the Caribbean Community (CARICOM).

## 2.6 The Multifaceted Roles of the AfCFTA

The AfCFTA provides a platform for African countries to collaborate and develop coordinated responses to trade disruptions, while also addressing the challenges posed by the COVID-19 pandemic.

### *2.6.1 The Role of AfCFTA in Resilient and Sustainable Trade amidst COVID-19 Pandemic*

African economies have been severely impacted by the COVID-19 pandemic, which is likely to have long-lasting effects. In 2020, the growth in Africa declined by 1.9%, marking the first contraction in over 20 years (IMF, 2021). The fiscal deficits of the continent are estimated to have almost doubled from 4.7% of the Gross Domestic Product (GDP) in 2019 to 8.7% in 2020 (Economic Commission for Africa [ECA], 2021). Despite the challenges posed by the pandemic, the Africa Continental Free Trade Area (AfCFTA) played a critical role in rebuilding trade in Africa by providing a platform for African countries to collaborate and develop coordinated responses to trade disruptions. The agreement facilitated the sharing of information and best practices among member countries, as well as the removal of trade barriers, which helped to boost regional trade and economic growth (Canton, 2021). Additionally, the AfCFTA provided a framework for addressing the challenges posed by the pandemic, such as disruptions to supply chains and reduced demand for goods and services. Overall, the AfCFTA played a key role in helping African countries to mitigate the impact of the pandemic on their economies and build more resilient and sustainable trade systems (African Union, 2021).

### *2.6.2 The Role of AfCFTA in Promoting Intra-African Trade*

The AfCFTA aims to create a single market for goods and services, with free movement of people and capital, and to promote intra-African trade by eliminating tariffs and non-tariff barriers. Studies have shown that intra-African trade is low compared to other regions in the world, with intra-African exports accounting for only 18% of the continent's total exports in 2019 (UNECA, 2021). However, the implementation of the AfCFTA is expected to increase intra-African trade by 52.3% by 2022 and by 56.3% by 2025 (UNECA, 2021).

The removal of trade barriers and the creation of a single market are expected to increase competition and efficiency, which will drive down prices and increase consumer choice. This, in turn, will create new opportunities for businesses to expand and invest across borders, leading to economic growth and job creation. Furthermore, the AfCFTA has the potential to unlock Africa's economic potential by creating a market of 1.2 billion people and a combined GDP of $3 trillion (UNECA, 2021). This will attract investment and increase the continent's bargaining power in the global market.

### *2.6.3 The Role of Technology in Facilitating the Implementation of the AfCFTA*

Technology is an essential enabler in creating an efficient and effective trade environment, and it is becoming increasingly important in the implementation of the AfCFTA. As noted by the African Union Commission (2021), technology has the potential to improve various aspects of trade, including border procedures, payments, customs, and logistics. The implementation of the AfCFTA is expected to lead to significant growth in intra-African trade, and technology can play a critical role in facilitating this growth. One area where technology is expected to be particularly helpful is in addressing non-tariff barriers to trade, such as border delays and other logistical challenges. Digital platforms can help to streamline these processes and reduce the costs associated with cross-border trade. Moreover, technology can also help to promote transparency and reduce corruption in trade-related transactions, which is a critical issue in many African countries. For example, blockchain technology can be used to create secure and transparent supply chains, reducing the risk of fraud and corruption.

### *2.6.4 The Role of the AfCFTA in Global Trade Relations and International Business*

The AfCFTA has the potential to significantly impact global trade relations and international business in Africa. As the largest free trade area since the creation of the World Trade Organization, the AfCFTA is expected to create a market of 1.2 billion people with a combined GDP of over $3 trillion (African Union, 2021). One potential impact is that the AfCFTA could lead to a shift in African countries' trading patterns, with increased trade among African countries and a decrease in dependence on external markets. This shift could potentially alter the balance of power in global trade and create new opportunities for businesses in Africa. Furthermore, the AfCFTA could encourage foreign businesses to invest in Africa to take advantage of the larger market and increased opportunities for trade. As a result, African countries may become more integrated into the global economy, leading to increased economic growth and development. However, there are also potential challenges and risks associated with the AfCFTA's impact on global trade relations and international business in Africa.

### *2.6.5 The Role of Public-Private Partnerships in Driving the Success of the AfCFTA*

Public-private partnerships (PPPs) have a critical role to play in driving the success of the AfCFTA. The agreement is aimed at boosting intra-African trade and creating a single market for goods and services, and PPPs can help to achieve these goals by leveraging the resources and expertise of both the public and private sectors. PPPs can facilitate investment in infrastructure, which is necessary to support the movement of goods and services across borders. This includes investments in transportation, telecommunications, energy, and other key infrastructure areas. By working together, public and private partners can pool their resources and expertise to develop and implement infrastructure projects that benefit both businesses and consumers. PPPs can also help to create an enabling environment for trade by addressing regulatory barriers and improving the business climate. This includes reforms to customs procedures, trade regulations, and investment policies. PPPs can facilitate the development of public-private dialogue mechanisms that bring together government officials, private sector representatives, and civil society organisations to identify and address issues that are hindering trade and investment.

Box 2.1 presents cases of African countries that have benefitted from the AfCFTA

**Box 2.1 Cases of African Countries and Businesses that Have Benefited from the AfCFTA**

***Rwanda:*** Rwanda has been actively involved in the implementation of the AfCFTA and has seen significant benefits. The country has reduced tariffs on a wide range of products, which has led to an increase in exports to other African countries. In addition, Rwanda has implemented a single customs territory, which has streamlined trade procedures and reduced costs for businesses.

***Nigeria's Dangote Group:*** The Dangote Group is a Nigerian multinational conglomerate that operates in a variety of industries, including cement, sugar, and flour. The group has already started to benefit from the AfCFTA by increasing its exports to other African countries. In particular, the group has increased its exports of cement to West African countries such as Ghana and Cameroon.

***Kenya Airways:*** Kenya Airways, the national carrier of Kenya, has also started to benefit from the AfCFTA. The airline has increased its routes to other African countries and has seen an increase in demand for its services. In addition, the airline has entered partnerships with other African airlines to increase connectivity across the continent.

## 2.7 Exploring the Broader Impact of the AfCFTA

The AfCFTA has the potential to go beyond trade and promote sustainable development in Africa by addressing some of the continent's most pressing challenges.

*Poverty alleviation:* The AfCFTA has the potential to alleviate poverty in Africa by promoting economic growth and job creation. According to the African Development Bank, the AfCFTA could lift 30 million people out of extreme poverty and boost the continent's income by $450 billion by 2035. This could be achieved through increased intra-African trade, which would create more opportunities for local businesses and reduce dependence on external markets. Figure 2.1 shows the potential impact of AfCFTA on poverty alleviation by 2035.

*Gender perspective:* The AfCFTA has the potential to promote gender equality by providing opportunities for women entrepreneurs to participate in trade and expand their businesses. Women entrepreneurs in Africa face several challenges, including limited access to finance, lack of market information, and cultural and social barriers. The AfCFTA could help to address some of these challenges by promoting women's participation in trade and creating an enabling environment for women-owned businesses to thrive. The agreement includes provisions on gender mainstreaming and women's empowerment, which could help to ensure that women benefit from the opportunities created by the AfCFTA.

*Youth perspective:* The AfCFTA has the potential to create job opportunities for the youth in Africa. According to the United Nations, more than 60% of Africa's population is under the age of 25, and youth unemployment is a significant challenge in many countries. The AfCFTA could help to address this challenge by promoting economic growth and job creation, particularly in

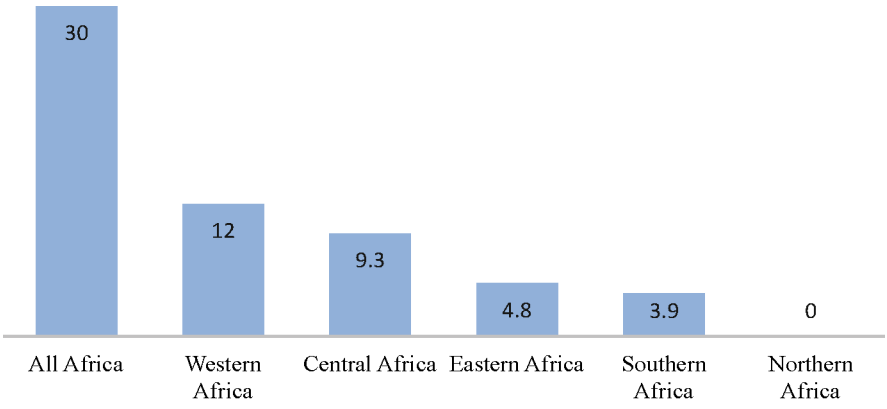


**Fig. 2.1** Potential impact of AfCFTA on poverty alleviation by 2035 in millions. (Source: Songwe et al. (2021) based on the AfCFTA's Economic and Distributional Effects compiled by the World Bank (2020))

sectors such as manufacturing, agriculture, and services. The agreement includes provisions on skills development and capacity building, which could help to ensure that young people have the necessary skills to take advantage of the opportunities created by the AfCFTA.

*Other areas:* In addition, the AfCFTA could also have a positive impact on other areas such as environmental sustainability and regional integration. By promoting intra-African trade, the AfCFTA could reduce the carbon footprint associated with the long-distance transportation of goods and promote the development of regional value chains. The agreement could also help to promote regional integration by creating a common market and facilitating the movement of goods, services, and people across borders.

## 2.8 Conclusion and the Future of Doing Business in Africa

The future prospects for the AfCFTA are promising, with the agreement having the potential to transform the African continent's economic landscape. The AfCFTA aims to create a single market for goods and services, facilitate the free movement of people, promote investment, and foster innovation and competitiveness. With the agreement in place, African countries can tap into a market of over 1.2 billion people and a combined GDP of more than $3 trillion, creating new opportunities for businesses and investors across the continent while eradicating absolute poverty for over 30 million people. In addition, the AfCFTA has the potential to spur industrialisation and diversify African economies, reducing their dependence on commodity exports.

However, realising these benefits will require significant efforts from African governments, private sector actors, and other stakeholders. African countries will need to invest in infrastructure, improve trade facilitation measures, and build the necessary institutions to ensure the successful implementation of the AfCFTA. Additionally, public-private partnerships will be critical in driving the success of the agreement, as the private sector has a vital role to play in driving investment and innovation in the African economy. Participating governments must encourage local firms to take advantage of the benefits associated with the after through corporate education and capacity building. To safeguard and ease investment in the AfCFTA's crucial additional measures, businesses must develop relationships with governments. For example, by establishing intra-regional trade partnerships, businesses will be able to compete in various markets and expand their business capacity to enhance large profits.

The future of doing business in Africa will depend largely on the successful implementation of the AfCFTA and other initiatives aimed at promoting economic integration and growth on the continent. The agreement presents an opportunity for African countries to leverage their collective economic strength, promote intra-regional trade and investment, and enhance their competitiveness in the global marketplace. As such, the AfCFTA has the potential to transform the African continent's economic landscape, creating new opportunities for businesses, investors, and entrepreneurs across the continent.

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CHAPTER 3

# Impact of Political and Legal Environments on International Trade

*James Atambilla Abugre, Joe Nellis, and David Ofosu-Dorte*

## 3.1 Introduction

Global economic activity is significantly influenced by international trade, which also stimulates economic development in both the developed and developing world. Trade between countries is fueled by differences in a variety of factors, such as resource endowments, climatic conditions, production costs, etc. International trade has been a vehicle through which job opportunities are created and the provision of a wide range of consumer goods and services. Not only that, but it has also played a significant role in the global rise in average living standards (Kline, 2010). Although cross-border trading has been growing quickly over the past few decades, international trade has long been a component of human civilization.

International trade allows countries to specialize in producing goods and services that they have a comparative advantage in, and then exchange those goods and services with other countries for products that they cannot produce as efficiently. This leads to increased efficiency, lower costs, and higher quality

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_3

products, which benefit both producers and consumers. Globalization and advancements in technology have made it easier for businesses to engage in international trade, opening up new markets and creating opportunities for growth. With the rise of e-commerce, businesses can now sell their products and services to customers around the world, regardless of their physical location.

However, international trade can also face challenges, such as trade barriers, tariffs, and regulations, that can make it more difficult or expensive for businesses to operate in foreign markets. Additionally, geopolitical factors such as political instability, social unrest, and conflicts can disrupt trade relations and create uncertainty for businesses operating in global markets. A government's policies toward trade, foreign investment, and intellectual property rights can also have a significant impact on international trade. Legal factors have a significant impact on international trade, as they can create either a favorable or unfavorable environment for businesses engaged in global commerce. Economic policies, trade agreements, and regulations are all important factors that affect international trade. These agreements and regulations can help to lower trade barriers, reduce tariffs, and provide a framework for resolving disputes between trading partners. Intellectual property laws, labor laws, and environmental regulations impact so much on international trade by creating additional costs or compliance requirements for businesses operating in different countries.

Despite these challenges, international trade is an essential component of the global economy, driving economic growth, creating jobs, and providing consumers with a wider range of products and services at competitive prices. Overall, political and legal factors can play a significant role in shaping the global trade environment. Businesses engaged in international trade need to stay informed about changes in policies, regulations, and trade agreements to adapt and take advantage of new opportunities, while also mitigating risks associated with political and legal uncertainties.

The chapter presents an overview of international trade with critical focus on the merits and demerits of it. The structure of international trade is discussed as well as the drivers that affect international trade with a sharp focus on the impact of political and legal aspects of the drivers. International and regional bodies and agencies that help to facilitate international trade are also highlighted and their roles discussed. The chapter concludes with the discussions and summarizes the key factors that limit the flow of free and fair international trade in the twenty-first century of the world among nations.

## 3.2 Overview of International Trade

International trade refers to the exchange of goods and services between countries or regions. In the globalized world we live in today, international trade is a crucial component of economic activity, driving growth and development across the globe (Kline, 2010). International trade is a significant factor in

openness among different countries and has contributed significantly to economic development. A key strategy for the expansion of the national economy in recent years has been international commerce. However, the importance of international commerce goes far beyond this; it also plays a role in promoting social and international relations between nations. The process of globalization has been accelerated by increased international trade.

International trade dates back to the sixteenth and seventeenth centuries of the barter trade system where goods were exchanged with other goods that one produced and lacked, respectively. The advocacy of trade liberalization soon became topical in the eighteenth century led by Adam Smith in his book "The Wealth of the Nations" in 1776. This shift in ideological thought called for the removal of trade barriers and restrictions by and among nations to open up the global market to world produce. This ideology has since been the driving force behind international trade for centuries leading to various innovations and trade agreements among countries and economic blocs.

Recent financial globalization facilitated by technology in the financial ecosystem has ensured that the world's economy is integrated and responsive to global happenings such as trade liberalization and protectionism policies, social and political dynamics, and legal and regulatory controls (Kiminza, 2021). The advancements in technology and transportation have made it easier for businesses to engage in cross-border trade. Businesses can now market their products and services to customers around the world, irrespective of their physical location. The easy access to international markets enabled by technology has turned the world into "one globalized village," ensuring free flow of funds, goods, and services across and into nations of the world. This promotes a world-class competitive trading environment and guarantees efficiency and quality in service delivery (Johnson & Turner, 2010). Global standardization of goods and services, pricing mechanisms, and regulatory frameworks have become uniform and streamlined without vast differentiation if any. International financial payments, which are made between trading nations' central banks and the private banking system, ease the transactions of international trade. International trade and the associated financial transactions are typically conducted to give a nation the commodities and services that it lacks in exchange for those that it produces in abundance; these transactions, working in tandem with other economic policies, tend to raise a nation's standard of living.

There are different forms of international trade, including import and export trade, intra-industry trade, and intra-firm trade (Kiminza, 2021). Import trade involves the purchase of goods and services from foreign countries, while export trade refers to the sale of goods and services to foreign countries. Intra-industry trade is the exchange of similar goods or services between countries, while intra-firm trade occurs when a company's subsidiaries in different countries engage in trade with each other.

International trade is influenced by various factors, including government policies, trade agreements, and economic conditions. Trade barriers such as

tariffs, quotas, and embargoes can make it more difficult or expensive for businesses to engage in international trade. On the other hand, trade agreements such as free trade agreements (FTAs) can help to reduce trade barriers and increase trade flows between countries (Johnson & Turner, 2010). Overall, international trade plays a critical role in the global economy, driving economic growth, creating jobs, and providing consumers with access to a wider range of products and services. However, it can also face challenges such as trade disputes, geopolitical tensions, and regulatory barriers that can impact trade flows and create uncertainty for businesses operating in global markets.

### *3.2.1 Classification of International Trade*

International trade operations, strategic alliances, and foreign direct investments are the three main categories under which international trade has been broadly classified. They are discussed in turns:

*International Trade Operations*
This category particularly encompasses the import, export, combined import-export operations, and transit activities that make up international business (Kline, 2010). Even though the parties may, in some cases, have divergent interests, they balance their differences and come to an understanding by weighing the advantages. Foreign sales contracts serve as the legal instrument for these foreign trade transactions, which are categorized legally as bilateral contracts (Weber & Peters, 2009). Most of the time, these deals are short term; however, the partnerships between the parties may be long term or short term as they deem necessary.

*Strategic Alliances*
This refers to the operation requiring collaboration among the various partners from different nations, with a focus on the transfer of technologies across borders (Johnson & Turner, 2010). This category primarily includes activities like franchising, sub-contracting, joint ventures (private or government), regional agreements etc.

*Foreign Direct Investments*
This closely relates to the terms of engagement, involvement/participation, risk, and profit, each of which is being used to its fullest extent. It serves as an option to entering the world market. It falls under the category of cross-border investment, in which interested citizens or multinationals of one economy make substantial investments in or other influences on businesses located in another (Kline, 2010).

## 3.3 Theories of International Trade

International trade theory can be classified under two main categories, namely, classical or country-based theories and modern or firm-based theories.

### *3.3.1 Classical or Country-Based Theories of International Trade*

The proponents of the country-based approach primarily hold the belief that economic development should take precedence and focus mainly on wealth accumulation within one's own country. The various theories under this traditional approach are discussed below.

*Mercantilism Theory*

This theory argues that countries must consider their own wellbeing first by increasing exports and reducing imports. Hence, effort should be made to guarantee that only the essential raw materials are imported. The theory also advances the idea that a country should prioritize amassing riches in the form of gold and silver in order to strengthen its national treasure (Horvat, 1999). Simply put, the classical economists who developed the theory of mercantilism argued that a nation's wealth and financial standing were primarily determined by the quantity of gold and silver it possessed. Thus, the best way to sustain a wealthy society is to increase the reserve of precious metals. According to this theory, in order for a country to produce enough goods to export them and to rely less on imports, exports must be strongly encouraged while imports must be rigorously discouraged. Because it focuses primarily on the principle of self-protection, this theory is frequently referred to as the protectionist theory. Some nations still adhere to this strategy in the twenty-first century and permit only a small quantity of imports while increasing their exports. The best examples of such nations are Japan, Taiwan, China, etc. It is essential to note that almost all nations at some point in history have adopted protectionist policies (Horvat, 1999). Supporting these protectionist measures, however, has a price, including high taxation and other drawbacks.

*Absolute Advantage Theory*

The mercantilism approach was criticized by Adam Smith in 1776 in his book "The Wealth of Nations." He argued that specialization and division of labor are essential for economic development in terms of global trade. Higher productivity is ensured by specialization, raising the country's population's quality of living in the process. In small markets, he argued, the division of labor would not allow for specialization, which would otherwise be simple in the case of bigger markets. This expansion encouraged more in-depth specialization, which raised output across all sectors (Smith, 1937).

The theory argues against governments attempting to control trade between nations or limit it on a global scale. Additionally, a nation's wealth and the quantity of gold and silver that its citizens possess should be determined by the

quality of living of that nation's citizens (Smith, 1937). The theory beliefs that trade restrictions reduce competitions and promote monopoly, thereby leading to poor management inefficiency in the market.

*Comparative Advantage Theory*

This theory was first propounded by David Ricardo on the principle of free trade or Laissez- Faire trade. This theory emphasizes the value of specialization as a source of increased output, and to treat international trade as a specific example of specialization. In a world where productive resources are limited and human wants are insatiable, each nation should concentrate in the production of goods it has the capacity to produce, export part of this production, and exchange other goods that it cannot efficiently produce with it or from the income it gets from the sale of it.

According to the theory, it is preferable for a nation to export goods for which its relative cost advantage over rival nations is higher than its absolute cost advantage. Even if a nation produces goods efficiently, it may choose to import them from another nation if there is a comparative benefit in doing so. In a similar vein, a country may still export a product to another country even if it is not highly efficient at importing certain products from other nations. In practice, this idea promotes beneficial trade (Horvat, 1999).

*Factor Proportions Theory (Heckscher-Ohlin Theory)*

The theories developed by Smith and Ricardo were ineffective for most countries because they could not decide which of the goods would be advantageous to them. The theories of absolute advantage and comparative advantage backed up the notion that a free and open market would assist nations in identifying which goods they could create effectively.

The Factor Proportions theory explains how countries can benefit from trade by specializing in the production of goods that make the most efficient use of their abundant factors of production. The theory was developed by two Swedish economists, Eli Heckscher and Bertil Ohlin, in the early twentieth century (Baskaran et al., 2011). The theory is based on the idea that different countries have different factor endowments, meaning they have varying amounts of labor, capital, and natural resources. The theory argues that countries should specialize in producing goods that make the most efficient use of their abundant factors of production.

For example, a country that has labor, but limited capital may specialize in labor-intensive industries like textile production. Meanwhile, a country with abundant capital but limited labor may specialize in capital-intensive industries like technology manufacturing.

The theory suggests that by specializing in these industries, countries can maximize their production and efficiency, leading to increased economic growth and overall welfare (Baskaran et al., 2011). Additionally, by engaging in international trade, countries can access goods and services that they may

not be able to produce themselves, leading to further gains in economic welfare.

Critics of the theory argue that it oversimplifies the complex realities of global trade and that it does not take into account factors like transportation costs, technological advancements, and government policies. However, the Factor Proportions Theory remains an important contribution to understanding the benefits of international trade and specialization.

### *3.3.2 Modern or Firm-Based Theory*

*Country Similarity Theory*

The country similarity theory of international trade posits that countries with similar characteristics, such as culture, economic systems, and resource endowments, are more likely to trade with each other than with countries that are dissimilar. This theory is based on the idea that countries that share similar characteristics will have similar demands for goods and services, and therefore, will be more likely to trade with each other (Horvat, 1999). The theory suggests that countries with similar levels of economic development and similar resource endowments are likely to trade in similar products. For example, countries with a high level of natural resources, such as oil-producing countries, are likely to trade with other countries that have a high demand for these resources, such as countries with large manufacturing industries.

Another aspect of the country similarity theory is cultural similarity. Countries that share cultural characteristics, such as language, religion, and social norms, are more likely to trade with each other. This is because cultural similarity can help to establish trust and build relationships between countries, which can facilitate trade (Baskaran et al., 2011).

However, the country similarity theory has been criticized for oversimplifying the complex factors that influence international trade. For example, trade may also be influenced by political factors, such as government policies and international relations, as well as economic factors such as exchange rates, tariffs, and trade agreements. Moreover, the theory does not take into account the fact that countries may have comparative advantages in producing different goods and services. Comparative advantage is the ability of a country to produce a particular good or service at a lower opportunity cost than another country, which is a key driver of international trade. While the country similarity theory may provide insights into the patterns of international trade, it is important to consider a range of factors when analyzing the dynamics of trade between countries.

The product cycle theory of international trade was developed by economist Raymond Vernon in the 1960s. The theory suggests that the life cycle of a product influences its international trade patterns. The product cycle theory assumes that products go through a life cycle consisting of three stages: new product, maturing product, and standardized product (Vernon, 1992).

In the new product stage, a product is initially developed and introduced in the domestic market. In this stage, the product is usually produced in the country where it was invented, and there is little or no international trade in the product. However, as the product gains popularity and demand increases, production is often outsourced to other countries with lower labor costs and resources. In the maturing product stage, the product becomes more widely adopted and demand increases, leading to increased production and international trade. During this stage, the product is exported to other countries where it has not yet been introduced, and production is often outsourced to countries with lower labor costs. In the standardized product stage, the product reaches maturity and becomes a commodity. At this stage, production is often moved to countries with the lowest costs, and trade patterns are determined by the relative cost advantages of different countries.

The product cycle theory suggests that the location of production and trade patterns are influenced by the product's life cycle stage (Vernon, 1992). Initially, production is concentrated in the country where the product was invented, but as the product becomes more widely adopted, production is shifted to other countries with lower costs. As the product reaches maturity, production is moved to countries with the lowest costs.

The product cycle theory has been criticized for oversimplifying the complexity of the factors that influence international trade, such as comparative advantage, economies of scale, and factor endowments. It also assumes that innovation always occurs in developed countries, which may not be the case in the globalized economy.

*Global Strategic Rivalry Theory*

The global strategic rivalry theory of international trade suggests that trade relations between countries are shaped by their strategic interests and geopolitical considerations. Countries engage in international trade not just to achieve economic gains but also to pursue strategic objectives such as geopolitical influence, military power, and national security. This theory assumes that international trade is not a zero-sum game and that countries may engage in trade practices that benefit them at the expense of others. It also suggests that countries may use trade policies and practices as a tool to advance their strategic objectives and gain a competitive advantage over other countries.

The global strategic rivalry theory is often associated with the idea of economic nationalism, which refers to policies aimed at protecting domestic industries and promoting national economic interests. Economic nationalism can take various forms, such as tariffs, subsidies, and quotas, and is often used by countries to shield their domestic industries from foreign competition and promote domestic production (Brander & Krugman, 1983). Moreover, the global strategic rivalry theory suggests that countries may use trade as a means of achieving geopolitical influence and promoting their national security interests. For example, countries may use trade agreements to forge closer political and economic ties with allies and to isolate their rivals. They may also use trade

sanctions to punish countries that pose a threat to their national security or geopolitical interests.

However, the global strategic rivalry theory has been criticized for oversimplifying the complex factors that influence international trade. It assumes that countries always act in their strategic interests and overlooks the fact that economic interdependence and cooperation can also play a role in shaping trade relations between countries. While the global strategic rivalry theory may provide some insights into the strategic considerations that influence international trade, it is important to consider a range of factors when analyzing the dynamics of trade between countries. The role of economic interdependence, cooperation, and comparative advantage should not be overlooked when evaluating the motives and consequences of trade policies and practices.

*Porter's National Competitive Advantage Theory*

Porter's national competitive advantage theory suggests that a country's ability to compete in the global marketplace is determined by four key factors: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry (Porter, 1985). These factors work together to create a competitive advantage for firms operating in a particular industry within a country.

Factor conditions refer to the resources and capabilities that are available in a country, including natural resources, human resources, capital, and technology. Porter argues that a country's competitive advantage in a particular industry is determined by the quality and availability of these factors. Demand conditions deal with the characteristics of a country's domestic market, including the size, growth, and sophistication of consumers. Porter suggests that a country's competitive advantage is influenced by the level of demand for products and services in its domestic market, as well as the characteristics of that demand. Related and supporting industries take into account the presence of complementary industries and suppliers that support the development and growth of a particular industry. Porter argues that a country's competitive advantage is enhanced by the presence of these industries and suppliers, as they provide inputs, knowledge, and support to firms in the industry (Porter, 1985).

Firm strategy, structure, and rivalry refer to the strategies and structures of firms operating in the industry, as well as the level of competition and rivalry within the industry. Porter suggests that a country's competitive advantage is enhanced by the presence of strong domestic firms that are innovative, flexible, and competitive. According to Porter, these factors work together to create a diamond-shaped framework of competitive advantage for a particular industry within a country. The strength and interdependence of these factors determine the degree of competitive advantage that a country can achieve in a particular industry. The theory has been widely applied to explain the success of industries and firms in different countries. However, the theory has also been criticized for oversimplifying the complexity of the factors that influence competitive advantage and for assuming that the same factors apply to all industries and

countries. The theory also overlooks the role of global factors, such as international trade and competition, in shaping the competitiveness of industries and countries.

## 3.4 Drivers of International Trade: Political and Legal Drivers Affecting International Trade

Due to the immense contributions that international trade brings to table of national economies and global transformation of living conditions, attempts have always been made by countries to formulate policies that inure to their benefit. Several factors influence the level of international trade in an economy. These driving factors of international trade can be broadly categorized into two main categories: demand-side and supply-side factors (Kline, 2010). Demand-side factors that drive demand for foreign goods and services include consumer preferences, income levels of the citizens, demographic factors, among others. The supply-side factors include technological advancement, resource availability, comparative advantage, etc. Both the demand-side and supply-side factors are heavily dependent on the political regime of the country, economy dynamics, technological development, legal environment regarding trade, social factors, among others (Morrow et al., 1998). However, this chapter focuses on the political and legal factors that impact on international trade and these are discussed below.

### *3.4.1 Political Impact on International Trade*

The political environment is one of the critical factors that affect international trade. It can serve as a catalyst and a disincentive in attracting foreign investment and/or facilitating the domestic industry to remain competitive in the global market. Political stability, political ideology, tax policy and its regime, trade restrictions (import and export regulations), international relations, among others, are the key political instruments that facilitate trade or otherwise in a country.

*Government Policy and Political Ideology*

Through a variety of policy initiatives, including the use of the state's purchasing power, promotion and branding, legislative protection, particularly for emerging businesses, and tax waiver mechanisms, government policies can significantly affect which companies in a given industry gain the most global market share. These policies have an effect on local industry development, which ultimately affects the unemployment rate, income levels, and economic growth of the nation as a whole (Weber & Peters, 2009). Each nation's government wants to grow exports since doing so will improve output, wealth, and the possibility of job creation. Additionally, a nation's government favors its people and businesses purchasing goods and services domestically as opposed to

importing them because this generates jobs for the nation. This policy agenda of any government is in tandem with the protectionist approach toward international trade where nations of the world are encouraged to look within and concentrate on trading domestically to protect the nation interest of the country (Morrow et al., 1998).

Nationalism unfair competition and "learning by doing" have all been put out as the pillars upon which governments embrace protectionism over time. Protectionism and liberalization (free trade policies) are essentially the two separate types of foreign trade policy and ways that nations manage global trade. Through the use of tariff and non-tariff measures, protectionism enables the home market to be protected from foreign competition, whereas free trade policy only permits the most minimal state intervention in foreign trade, which is determined by supply and demand factors operating in a free market (Morrow et al., 1998).

The trade policy of governments is the by-product of the political ideology of the state. Thus, left-center political leanings that advance socialism and communism where the state is encouraged to take active part in the control and production of goods and services and for the state to take full control of all the standards of production and other resources, respectively, impact greatly on how international trade is transacted in such ideologies (Weber & Peters, 2009). For instance, the Soviet Union countries and their allies such as China are state-led economies with huge state interventions in their trade policies. Restrictive policies are then put in place to protect, safeguard, and sustain new entrants and existing businesses. These deliberate policies due to their political ideology somehow close their domestic market from the rest of the globe (Johnson & Turner, 2010). Access to the market especially for products that the state perceives to be of national security interest are given state cushion through huge purchases from the government, tax waivers, capital support, and import restrictions relating to products of similar nature.

On the other hand, right-center governments that believe in capitalism where the forces of the market determine the allocation of goods and services and promote property owning democracy in a free state by individuals certainly open up the market for global trade and competition. Policies of the government under this political ideology are geared toward promoting efficiency of the private sector through empowerment and competition (Shaffer, 2001).

The differences in the political ideology of governments, therefore, influence the spending pattern of the state, tax regime of the government, the interventions of the government in industrial policy, and engagements with the international community through trade treaties and agreements. For instance, the approach to trade policies and spending patterns by the Republican and Democratic governments in the United States differ. This is in line with their political ideology and principles. Again, political alliances resulting from ideological set up can also impact international trade. Countries that have close political relationships may have more favorable trade agreements or policies in

place, while countries that are in conflict may face trade restrictions or other barriers.

*Political Stability*

Political stability can have a significant impact on international trade. Countries that have stable political systems are often more attractive to foreign investors and trading partners, as they offer a more predictable and reliable environment for business transactions (Shaffer, 2001). On the other hand, countries with unstable political systems can create an uncertain environment for trade, which discourages foreign investment and limit trade opportunities.

One way that political stability affects international trade is through the establishment of trade agreements. Countries that have stable political systems are more likely to establish and maintain trade agreements with other countries, as these agreements often require long-term commitments and a stable political environment. These agreements can create a more predictable and reliable framework for trade, which can increase investment and trade flows between countries.

Additionally, political stability can affect the availability and cost of resources and raw materials, which can in turn affect international trade. For example, political instability in a country that is a major producer of oil or other natural resources can create supply disruptions and price volatility, which can impact trade relationships and global markets (Shaffer, 2001). Finally, political stability can also impact the overall economic performance of a country. Countries with stable political systems are more likely to have stronger and more stable economies, which can create a more favorable environment for trade and investment. Conversely, political instability can lead to economic instability, which can hinder trade relationships and discourage investment.

*Restrictions on Imports*

Governments in some countries employ trade restrictions to restrict or deter imports from other nations. The most frequently used restriction mechanisms include tariffs, quotas, and other non-tariff measures.

- ***Tariffs***

A tariff, often known as a duty, is a levy imposed on goods as they leave a customs zone. Tariffs are categorized as either revenue-producing or protective. Protective tariffs aim to make imported goods more expensive while protecting domestic producers from overseas rivalry. Revenue tariffs are intended to raise money, not to limit imports. Of course, the two sets of goals are not incompatible. Protective tariffs generate income, while revenue tariffs offer protection to any domestic producer of the duty-bearing items, unless they are so high as to prevent imports (Schaffer et al., 2014).

There are two different types of tariffs: ad valorem tariffs, which are determined as a proportion of the value of the imported goods, and specific tariffs, which are assessed as a fixed fee on imported goods.

Consumers pay more for imported goods when the government of a nation applies an import tax (tariff). Depending on the justification, tariffs can take different forms. For instance, a tariff could be implemented to make imported goods more expensive than those made domestically. In order to encourage exporters to create local subsidiaries that will make the automobiles and support local jobs, some countries tax imported cars.

- ***Import Quotas and Voluntary Export Controls (VER)***

A quota is a cap on the amount of a particular commodity that can be imported into the country. Quotas may be freely chosen or mandated by law (Schaffer et al., 2014). Import quotas are determined by the importing government, whereas VER are decided by the exporting country in collaboration with the importing country. The same aim is achieved by tariffs and quotas, which is to limit imports while protecting domestic firms from external competition. A tariff reduces both supply and demand for the imported article from outside by raising the price of a foreign good above the price at which the market is in equilibrium. A quota restricts supply to a set amount, driving up the price above the point at which the market is in equilibrium and reduces demand both in the short and long term. In fact, between 2008 and 2012, deteriorating economic conditions forced a number of countries to impose import quotas intended to protect their local industries and sustain their economies from distress (Kiminza, 2021).

- ***Non-tariff Restrictions on Imports***

  - ***Rules and Regulations***

Non-tariff barriers include rules and regulations governing the content or quality of products as well as other standards that restrict imports. One of the most common non-tariff barriers is the use of product standards, which may act as trade barriers. For instance, when South Africa limits the importation of wine from Malaysia, it is either protecting the wellbeing of South African consumers or preserving the financial viability of South African wine producers.

Along with strict packing and shipping regulations, anti-dumping rules, airport and harbor permits, and onerous customs processes, obstacles might also have legal or anti-import objectives, or even both.

Again, in order to prevent the introduction and spread of plant pests and diseases in international trade, phytosanitary requirements may be introduced by a country or union. These measures aim to ensure that plant products, including fruits, vegetables, grains, and seeds, are free from harmful pests and diseases that could cause economic or environmental damage in the importing

country. Phytosanitary requirements can also have significant impact on international trade. Phytosanitary measures can include a range of activities, such as inspections, testing, quarantine, and the use of pesticides or other treatments to control pests and diseases. The specific requirements vary depending on the importing country's regulations and the type of plant product being traded. For example, countries may require phytosanitary certificates to accompany shipments of plant products, while others may require fumigation or other treatments to be applied before export. If a country's phytosanitary requirements are too strict or burdensome, they can create barriers to trade and limit the export opportunities for agricultural producers. On the other hand, if phytosanitary requirements are too lax, they can increase the risk of introducing harmful pests and diseases into the importing country, which can lead to economic losses and environmental damage.

– ***Currency Controls***

Governments may impose restrictions on the exchangeability of a certain currency (often the local currency) in an effort to reduce imports. Additionally, some countries control the exchange rate aggressively in order to discourage imports.

– ***Local Content Requirements***

Several countries insist that a specific proportion of a good or an item be produced or "assembled" locally. This mandates that the domestic partners relied on for business transactions must be a local company.

– ***Free Trade Zones and Export Financing***

Most nations designate specific regions as free trade zones. To encourage trade with foreign nations, these regions have lowered tariffs, taxes, customs, processes, or other obstacles. Governments in some instances offer financial and technical assistance to domestic business to encourage the export of locally produced goods and services to the external market.

• ***Subsidies for Domestic Industry***

For local industry players to produce items at a lesser cost than their rivals in other regions of the world, a government may offer subsidies to domestic companies. Ceteris paribus, the subsidies will result in a rise in export demand for such companies due to the lower production costs. Businesses in other countries receive government incentives if the manufactured commodities are exported. Exporting commodities manufactured with the help of government subsidies into the international market helps in generating revenue from abroad. These companies could be able to offer their products at lower prices than their rivals from abroad thereby increasing the demand of these products (Weber & Peters, 2009).

It may be argued that every government provides subsidies for businesses in some fashion, yet some subsidies are more obvious than others. In order to give domestic businesses ready market leverage, subsidies may take the form of free loans or low interest rates, land, tax exemptions, and government purchases of their goods. Through the transfer of demand and supply, these subsidies give businesses a lower operating cost structure, which lowers the price of their products and enables them to produce on a bigger scale and supply the world market (Jackson, 1997).

China is one example of a country that uses subsidy initiative to incentivize its industrial landscape by providing machinery and power at cheaper cost to its industry, especially the new entrants. This subsidy policy by China has made its goods cheaper, competitive, and available in large volumes. The policy has also served as an incentive to attract huge foreign direct investments of multinational corporations into the Chinese economy over the last three decades.

- ***Restrictions on Piracy***

Every country has its own policy about piracy. International trade flows may be impacted by a government's lack of anti-piracy measures. Inaction on the part of the government to stop piracy could lead to import restrictions and perhaps discourage multinational corporations from trading to that country (Schaffer et al., 2014). For instance, China has a very high rate of piracy. The so-called pirates produce CDs and DVDs that are almost identical to the genuine goods produced in the United States and other countries. They provide CDs and DVDs for sale in stores and on the street for less money than what the original items would have cost. As a result, imports are copied for local consumers rather than being given the originals. According to estimates, Chinese piracy costs the American video, music, and software producers nearly two billion United States dollars per year in sales.

### *3.4.2 Legal Impact on International Trade*

Legal systems have a significant impact on international trade. The legal framework governing trade affects how businesses operate, how contracts are enforced, and how disputes are resolved (Kiminza, 2021). Countries with effective and transparent legal systems tend to have more robust and stable economies, and they are generally more attractive to foreign investors (Jackson, 1997).

The legal systems of different countries can vary widely in terms of their structure, procedures, and legal traditions. These differences can create uncertainty and increase the costs of doing business across borders. The legal environment impacts on international trade in different forms. These are discussed in turns below.

*The Type of Legal System*

The type of legal system in a particular country can have a significant impact on international trade. Businesses that are able to navigate these legal systems effectively may be able to take advantage of unique opportunities, while those

that are unable to do so may face significant challenges. There are several types of legal systems that affect international trade. The most common ones are:

***Common Law***—Common law systems are based on judicial decisions and precedents set in previous court cases and rulings. This type of legal system is used in Commonwealth and other countries such as the United Kingdom, the United States, Canada, and Australia. Common law systems tend to place a greater emphasis on individual rights and the protection of property rights (Shaffer, 2001). This can be important for international trade as it provides greater certainty and predictability in commercial transactions.

In terms of international trade, differences in dividend policies can affect the types of companies that are able to enter foreign markets. Companies that are reliant on dividends as a source of funding may prefer to enter markets where dividend policies are more flexible (Shaffer, 2001). In common law countries, dividend policies tend to be more flexible and based on shareholder preferences. Companies have more discretion in setting dividend policies and can adjust them based on changing circumstances. This can be attractive to foreign investors, as it allows for greater responsiveness to market conditions and investor needs. As a result, common law countries may be more attractive for foreign investment, as well as for companies looking to raise capital through stock markets. Again, dividend policies can affect the level of investment and trade flows between countries. Common law countries with flexible dividend policies may be more attractive to foreign investors, leading to greater investment and trade flows from multinational companies across the investment community. Shareholders usually enjoy low taxes from their dividend earnings and are therefore encouraged to invest more in these economies.

***Civil Law***—Civil law systems are based on written laws and codes, rather than on judicial decisions. This type of legal system is used in countries such as France, Germany, Japan, and China. Civil law systems tend to place a greater emphasis on the rights of society as a whole, rather than on individual rights. This can make it more difficult for foreign businesses to operate in these countries, as regulations may be more complex and difficult to navigate.

Civil law countries tend to have more rigid dividend policies that are based on legal requirements and corporate regulations. Companies are required to pay out a certain percentage of profits as dividends and may face legal consequences if they do not do so. This can create stability for investors and provide greater protection for minority shareholders (Shaffer, 2001). However, it can also limit the flexibility of companies and may make them less attractive to foreign investors who are looking for greater returns on their investment. Companies that are more focused on long-term growth may prefer markets where dividend policies are more rigid. Civil law countries with rigid dividend policies may be less attractive to foreign investors, leading to lower levels of investment and trade. Dividend payouts and earnings by shareholders are always heavily taxed and this can serve as a disincentive to attract foreign capital into the economy. However, for long-term growth of the company, the high taxes may encourage shareholders to invest back their dividends into the

company and later earn capital gains from the plough backs, a condition that can positively affect the capital structure of the company.

***Islamic Law***—Islamic law, also known as Sharia law, is based on the teachings of the Quran and the Sunnah. This type of legal system is used in Muslim countries, such as Saudi Arabia, Iran, and Pakistan. Islamic law places a greater emphasis on ethical and moral considerations, which can be important in business transactions. However, it can also create cultural and religious barriers for foreign businesses.

***Customary Law***—Customary law is based on the traditions and customs of a particular society or group. This type of legal system is often used in developing countries, particularly in rural areas. Customary law can be difficult for foreign businesses to navigate, as it may be less formal and less predictable than other legal systems. Foreign investors feel insecure as the cultural dynamics dictate the type of business that can operate in a given geographical location.

*Intellectual Property Rights (IPR)*

IPR play a critical role in international trade as they are designed to protect the rights of creators and owners of intangible assets such as patents, trademarks, copyrights, and trade secrets. IPR creates incentives for innovation and creativity (Schaffer et al., 2014), which in turn helps drive economic growth and development while weak protections can lead to theft and piracy. However, it is important to strike a balance between protecting the rights of creators and owners and ensuring that intellectual property rights do not create undue barriers to entry or hinder competition (Jackson, 1997).

There are several ways in which intellectual property rights affect international trade. These include but not limited to the following.

***Encouraging innovation and creativity***—Intellectual property rights encourage innovation and creativity by providing legal protection to individuals and companies for their inventions, products, and brands. This protection incentivizes companies to invest in research and development, which leads to the creation of new products and technologies.

***Promoting international investment***—Companies that hold valuable intellectual property rights are often more attractive to foreign investors, as they have a valuable asset that can be used to generate profits. This can lead to increased international investment and trade.

***Preventing theft and piracy***—Strong intellectual property rights can help prevent theft and piracy of copyrighted material, trademarks, and patented inventions. This protects the rights of the creators and owners of the intellectual property and provides a legal framework for addressing infringements.

***Creating barriers to entry***—Intellectual property rights can create barriers to entry for foreign companies, as they may be required to obtain licenses or pay royalties to use patented inventions or trademarks. This can make it more difficult for foreign companies to compete in certain markets.

***Resolving disputes***—Intellectual property rights provide a legal framework for resolving disputes between parties who hold conflicting claims to the same intellectual property. This helps ensure that disputes are resolved fairly and efficiently.

*Labor Laws*

Labor laws and regulations affect international trade in several ways, both positively and negatively.

On the positive side, strong labor laws create a stable and productive workforce, which can attract foreign investment and lead to increased trade. Labor laws that protect the rights of workers, ensure safe working conditions, and provide for fair compensation can help build a strong and reliable workforce, which can make a country more attractive to foreign companies (Jackson, 1997).

In addition, labor laws help to ensure a level playing field for companies operating in different countries. For example, minimum wage laws and restrictions on working hours help prevent companies from exploiting workers in countries with weak labor protections in order to gain a competitive advantage over companies that operate in countries with stronger labor protections.

On the negative side, labor laws can also create barriers to trade. Companies may be required to comply with different labor laws in different countries. This increases costs and creates administrative burdens. For example, labor laws that require companies to provide specific benefits to workers, such as healthcare or retirement plans, can make it more difficult for companies to enter foreign markets. Similarly, some labor laws may be seen as protectionist measures designed to restrict imports from foreign countries. For example, countries require that a certain percentage of a product's value be produced domestically in order to be sold in that country. These types of laws can make it more difficult for foreign companies to compete in those markets (Qureshi, 2022).

## 3.5 The Role of Multilateral and Bilateral Institutions in International Trade

International trade is affected by various institutions that work together to facilitate and regulate the flow of goods, services, and capital between countries (Qureshi, 2022). These institutions can be categorized into two main types: multilateral and bilateral institutions.

### *3.5.1 Multilateral Institutions*

*World Trade Organization (WTO)*

The WTO is an intergovernmental organization that oversees and regulates international trade. Its goal is to promote free and fair trade by reducing trade barriers and ensuring that trade rules are followed by all its member countries (Chaisse & Matsushita, 2013).

*International Monetary Fund (IMF)*
The IMF promotes international monetary cooperation, facilitates international trade, and promotes economic growth and stability. It provides loans to member countries experiencing economic difficulties and provides technical assistance to help countries improve their economic policies.

*World Bank*
The World Bank is an international organization that provides loans and grants to developing countries for economic development projects. It promotes sustainable economic growth and poverty reduction by financing projects in areas such as infrastructure, health, education, and environmental sustainability (Chaisse & Matsushita, 2013). The Bank has subsidiary bodies such as the International Financial Corporation and International Development Association among others that facilitate the implementation of its policies.

### *3.5.2 Bilateral Institutions*

*Free Trade Agreements*
Free Trade Agreements (FTAs) are agreements between two or more countries that aim to reduce trade barriers and increase trade between them. They typically involve the reduction or elimination of tariffs and other trade barriers, as well as the establishment of rules to govern trade between the countries (Qureshi, 2022). For instance, the African Continental Free Trade Area (AfCFTA), set up in 2018, is aimed at creating a single continental market for goods and services in Africa. The agreement was signed and ratified by 54 African countries with the main objective to promote intra-African trade and economic integration by removing trade barriers, promoting the free movement of people and goods, and creating a level playing field for African businesses. The agreement is expected to boost trade among African countries by up to 52% by 2022 and increase intra-African trade by $35 billion per year. The AfCFTA covers a market of 1.3 billion people with a combined Gross Domestic Product (GDP) of over $3.4 trillion, making it the largest free trade area in terms of participating countries since the formation of the World Trade Organization. The agreement is also expected to enhance Africa's competitiveness in global markets and promote the continent's economic diversification and industrialization.

*Custom Unions*
Customs unions are agreements between countries to eliminate trade barriers between them and establish a common external tariff on goods imported from outside the union. The European Union and the African Free Continental Trade Area are examples of customs unions.

*Bilateral Investment Treaties (BITs)*
BITs are agreements between two or more countries that aim to protect and promote foreign investment in each other's territories. They provide legal protections and guarantees to investors, such as protection against expropriation, and facilitate the movement of capital between the two countries (Chaisse & Matsushita, 2013). The Economic Community of West African States (ECOWAS) has a treaty of free movement of goods and persons among member states with the goal of promoting inter-trade for economic development.

## 3.6 Conclusion

International trade has become a crucial driver of economic growth and development for countries across the globe. But it also operates within a complex political and legal environment which affects its free flow. Political and legal factors such as trade policies, regulations, and agreements have a significant impact on international trade.

The political environment of international trade is characterized by the interplay of various factors, including government policies, political stability, and relations between countries. Trade policies and regulations are influenced by political ideologies, national interests, and geopolitical considerations and can be shaped by factors such as elections, political crises, and changes in leadership.

The legal environment of international trade is governed by a complex set of international and domestic laws and regulations. International trade laws and agreements, such as those established by the WTO and bilateral agreements, provide a framework for regulating trade between countries, protecting intellectual property rights, and resolving disputes.

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CHAPTER 4

# Trade and the Labour Market in Africa

*Priscilla Twumasi Baffour*

## 4.1 Introduction

Africa is the youngest continent in the world, with a median age of about 20 years; it is estimated that by 2050, one-third of all young people worldwide will reside in Africa. Africa's large and rapidly growing youth population is regarded as one of its greatest assets and would play a crucial role in determining the continent's future development. Yet, most governments in Africa struggle to tap into this demographic dividend due to structural rigidities to spur growth and generate employment that has resulted in high unemployment rate among the youth.

It is widely acknowledged that trade is a crucial driver of economic growth and development. Through trade, the most developed regions and nations have achieved remarkable success in lifting their populations from poverty to prosperity. International trade is known to be one of the fastest-growing economic activities in the global economy, accounting for a significant portion of GDP in most countries, despite temporary setbacks in recent decades (Jansen & Lee, 2007).

Arguments in favour of trade openness have been premised on the foundation that trade creates larger markets that enable firms to attain economies of scale, increase investment returns, and facilitate the adoption of new technology. Despite the success of East Asia and other developed nations have been attributed to trade, sub-Saharan Africa (SSA) is yet to use trade as a potent

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_4

instrument to promote rapid and sustainable economic growth and development.

Evidently, the late 1970s to early 1980s was a period when many SSA countries opened their economies to free trade at the time when most adopted Structural Adjustment Programmes (SAP) to salvage their economies from crises (Aryeetey & Twumasi Baffour, 2022). As a result, despite a general improvement in trade, the region remains marginalized internationally. This has been attributed to the concentration of exports of primary products that do not command high prices on the global market and the huge imports of manufactured products.

Sub-Saharan Africa (SSA) is the only region in the world that has not been able to use trade as a potent tool to achieve rapid and sustainable economic growth and development. SSA has a greater proportion of its population living in poverty than any other region in the globe, with more than 50% of its people living on less than $1.25 per day. The region lags behind in terms of global trade as its contribution to global trade remains at the periphery, contributing less than 3% to global trade within the past decade. Indeed, SSA contributed on average about 2% to global trade between 2010 and 2019 (Turkson et al. 2022).

According to evidence based on the experiences of the Asian countries, export-intensive manufacturing is able to generate a substantial number of employment. In fact, nations such as Bangladesh, China, Malaysia and Vietnam developed light manufacturing by focusing on textile and garment industries in order to accelerate industrialization. In Africa, key among the myriad of challenges faced by manufacturing and industrialization are market fragmentation and limited domestic market size. As a result, in March 2018, African countries signed the AfCFTA, which commits countries to eliminate tariffs on 90% of goods, liberalize trade in services progressively, and resolve other non-tariff trade barriers among member countries. Upon implementation, this agreement will make Africa the largest free-trade zone in the globe. In February 2022, eight countries representing the continent's five regions—Cameroon, Egypt, Ghana, Kenya, Mauritius, Rwanda, Tanzania and Tunisia—participated in a pilot AfCFTA Guided Trade Initiative (GTI), which aims to facilitate trade among interested AfCFTA state parties that have met the minimum requirements for trade, under the agreement. Essentially, removing both tariff and non-tariff barriers within AfCFTA has the potential to increase the volume of intra-African exports by 40% to 50% for the period 2020–2040 (UNECA, 2018). The scale and the extent of the agreement, however, provide varied opportunities for member states to harness for national development.

Compared to a conventional free-trade area, the AfCFTA has a broader scope. The agreement provides a framework for the liberalization of trade in goods and services and, once completely implemented, is expected to cover all 55 African countries with a combined estimated GDP of $3.5 trillion and a population of over 1.2 billion (World Bank, 2020). The AfCFTA has the potential to considerably increase member countries' income and well-being,

and its implementation could create a substantial number of new jobs. The World Bank estimates that by 2035, AfCFTA could increase regional income by 7%, accelerate wage growth for women and lift 30 million people out of extreme poverty.

This chapter therefore analyses existing data to establish historical labour market trends and explore options for African countries to harness opportunities of trade through increased diversification, productivity and development of value chains. The subsequent section discusses the literature on trade and employment by reviewing both theoretical and empirical literature on trade and the labour market, followed by a presentation of stylized facts on trade and the labour market in Africa. The fourth section examines how regional integration can facilitate the African labour market by focusing on the AfCFTA, while the conclusion and policy recommendations are presented in the final section.

## 4.2 Theoretical Review: Theory and Empirics

Neoclassical economists argue that a labour abundant country is expected to be characterized by low wage whilst labour-scarce country will have relatively high wage. The Heckscher-Ohlin model of international trade posits that trade between labour-abundant and labour-scarce countries would lead to the contraction of labour-intensive industries in the latter. Even if such trade stimulates the growth of capital-intensive industries in high-wage countries, job losses in labour-intensive industries will almost undoubtedly outweigh job gains in capital-intensive industries. Consequently, total employment in manufacturing will decline. The reason for the expectation of import competition from low-wage countries to be a cause of manufacturing job loss in high-wage countries also hinge on the timing of such happenings.

According to Bernard et al. (2007), the theoretical foundation of employment generating impact of trade is dominated by theories of comparative advantage by Ricardo and Heckscher-Ohlin-Samuelson. Recent developments in trade research globally has been centred on trade in the context of heterogeneous firms and bargaining, trade in tasks, labour market frictions and incomplete contracts (see Helpman et al., 2010; Egger & Kreickemeier, 2009; Davis & Harrigan, 2007; Melitz, 2003). Essentially, both empirical and theoretical literature highlight the positive and negative employment effects of international trade, with significant overall positive effects.

In comparative advantage theories of Ricardo and Heckscher-Ohlin-Samuelson, trade openness, compared to trade protectionism, is the means to achieve global efficiency. The assumption is that the removal of domestic market constraints and growth in exports stimulates demand products that are either new or already existed. Moreover, it facilitates the adoption of novel production techniques with opportunities for large scale production where economies of scale are maximized. According to the Ricardian paradigm of comparative advantage, growth in export may be driven by differences in productivity and relative price differences in autarky. Also, export growth could be

the result of disparities in factor intensity and factor abundance across industries and countries. When countries begin to trade, exporting firms are expected to increase their scale of production, while firms that produce for the domestic market contract, assuming all other factors remain constant. Consequently, employment in the export sector rises while it falls in the import sector (Bernard et al., 2007). Thus, international trade leads to reallocation of workers, where winners and losers are created in the process.

The comparative advantage models of Ricardo and Heckscher-Ohlin-Samuelson are, however, not able to draw accurate conclusions regarding the overall impact of trade on employment. As Mussa (1978) notes, this is a consequence of the assumptions of full employment and the absence of cost associated with the adjustment process. Also, theories of comparative advatage are unable to explain the pattern of trade beteween homogeneous trading partners, in the same sectors, or with products that are differentiated. Grubel and Lloyd (1971) demonstrate that a significant portion of recent international trade follows these patterns.

To make Ricardo's and Heckscher-Ohlin-Samuelson's comparative advantage models more realistic, other theorists modified their underlying assumptions. Myint (1958) proposed the surplus theory as an extension of Smith's theory, which attempts to explain trade in the context of underdeveloped nations. The surplus theory postulated the presence of excess capacity in addition to an inelastic domestic demand for domestic goods. Prediction of the model, therefore, is that international trade leads to the use of resources, which hitherto were not utilized, and broadens market access leading to increase in employment. The advantage of the surplus model over the Heckscher-Ohlin-Samuelson model is that when there is a lack of effective pricing system, the surplus model emphasises on increased production by using dormant resources and through an inflow of foreign capital, which is a critical component that complements local production.

As noted by Janson, other theories have similarly relaxed the assumption of full employment and postulated that the presence of certain domestic and labour market policies could hinder adjustment processes in the labour market. According to Jansen and Lee (2007), trade could increase employment in countries with elastic labour supply. In addition, Brecher (1974) suggests that in countries with enforced minimum wages, export reduces labour demand in import-competing sectors, which results in increased unemployment in such firms. This is due to the comparatively higher wages that are offered by exporting firms which attract more workers.

Over the years, trade theorists have examined trade in the context of heterogeneous firms and bargaining, trade in tasks (offshoring), labour market frictions and incomplete contracts to explain their potential to generate employment. It is important to note that most of the current models arose as a result of empirical findings that contradicted the explanations provided by the earlier trade models. Therefore, the new models add an amalgamation of economies of scale and consumer preferences as a source of variation, which causes

similar firms to concentrate in the production of different varieties of products, thereby promoting bilateral trade among nations (Arizala et al. 2019; Bernard et al., 2007). Such models provide insightful forecasts regarding the effects of international trade on employment.

### *4.2.1 Bargaining and Firm Heterogeneity Theory*

The article by Melitz (2003) serves as the foundation for theoretical works that incorporate firm heterogeneity and bargaining into the trade-employment nexus. There have been a number of extensions by Helpman et al. (2010), Egger and Kreickemeier (2009), and Davis and Harrigan (2007). Melitz (2003) model of heterogeneous firm hypothesizes that international trade exposure drives firms that are the most productive into the market for exports, given that entrance into the export market requires fixed costs which increase cost per unit. This, according to the author, will simultaneously compel the least productive firms which would mostly produce for the local market, to leave the market. The constant exit of the non-productive firms coupled with marginal export gains of productive firms will cause a reallocation of resources from the former to the latter. Consequently, exporting firms that are more productive than their competitors would employ a larger workforce. The model predicts that trade increases opportunities in employment generation of firms that export, while reducing employment of firms in the import-substitution sector.

Egger and Kreickemeier (2009) expanded the work of Melitz (2003) by incorporating fair wages into the heterogeneous firm model. They argued in cases where there is excess labour supply, exporting generates equilibrium unemployment since employers have no incentive to reduce wages for the fear of its negative impact on work effort. Firms may lay off employees and hire new ones if workers feel entitled and agitate for a higher wage due to the company's increased profits.

On the subject of trade in tasks (offshoring), some models emphasize trade in tasks or offshoring as the key factor that determines employment generating effect of trade. Grossman and Rossi-Hansberg (2008) examined the effect of trade in tasks in a model with the assumption that a single firm that employs both skilled and unskilled workers executes a variety of tasks that are ranked according to the degree of skill required. The model also assumed the firm produces in two nations, one which is rich in skilled labour while the other has abundant unskilled labour. The authors indicate that given skilled workers are comparatively less expensive in the skill-rich country, firms could allocate more skill-intensive tasks to the skill-rich nation and outsource less skill-intensive tasks to the skill-poor country. The fundamental inference of the model therefore is, due to the increased profitability associated with trade in tasks, it enables firms to increase labour demand for the inexpensive factor.

Finally, on the theory of contract, the work of Matusz (1986) constitutes one of the earlier models that emphasize contracts. The author incorporated a

simplified version of implicit contract in a Heckscher-Ohlin model. Matusz (1986) demonstrated that sticky wages and unemployment are the results of an implied agreement between firms that are risk-neutral and risk-averse workers; the study indicates that a movement towards free trade could cause a long-run movement of the labour force among sectors exhibiting high security of tenure on the job and those exhibiting low security, as on the aggregate, unemployment rises in firms and sectors with low employment security. Essentially, the author demonstrates that a shift towards free trade or an enhancement in trade terms can alter contractual relationships, thereby reducing security in employment.

### *4.2.2 Empirical Literature*

The empirical studies on the potential of trade to generate employment in the context of developing countries remain scarce. Utilizing firm- or industry-level data, the current literature focuses primarily on studies of developed nations. For example, Lichter et al. (2013) analysed the impact of exporting on firms' labour demand using administratively linked employer-employee panel data for the years 1996–2008 in Germany. The study adopted the Hicks-Marshall laws of derived demand, according to which international trade increases competition and the price elasticity of product demand for exporting firms, resulting in a more elastic demand for labour. Their findings indicate that exporting activity positively impacts employment. The research also indicates that exporting had a positive impact on the own-wage elasticity of unconditional labour demand.

Tuhin (2015) examined the impact of international trade on employment in Australia, by focusing on manufacturing industries following an 8.4% decline in employment in the sector. The study estimated a labour demand function using data from nine manufacturing industries for the period 1969 to 2002. Results show that imports have a negative correlation with employment, whereas exports have a positive correlation with employment. Consequently, this study demonstrates that the magnitude of trade's effect on employment is industry-specific.

Fu and Balasubramanyam (2005) in a study on China examined the impact of trade on the demand for labour by Township and Village Enterprises (TVEs) using panel data from 29 provinces for the years 1987–1998. The study utilized the 'vent for surplus' theoretical paradigm developed by Smith and Myint. The empirical findings indicate that exports have effectively provided a viable avenue for the utilization of excess capacity in addition to labour. Also, the study observed, export growth in manufacturing industries that used labour intensively contributed to the growth of industrial output and the transfer of significant quantities of surplus labour from the agricultural sector into these sectors.

In a study on South Africa, Edwards (2004) utilized two phases of firm-level surveys to examine the effects of globalization on employment. The author estimated a labour demand equation and found that rising import penetration

has a negative effect on employment in large firms. Despite improvements in export competitiveness and export growth because of trade liberalization, export firms also experienced relatively substantial employment decreases.

Similar to this, Nicita (2005) in Madagascar used household-level data to investigate the distributional effects of employment change resulting from international trade in the textile and apparel industry. The study's findings indicate that the textile and apparel industry create jobs for the underprivileged and raises earnings. In the late 1990s, they discovered that an increase in exports led to a 20% increase in employment. The study also observed a 40% average wage premium for textile and apparel employees relative to their counterparts in the informal economy. Notably, the benefits of export growth were found to favour urban and skilled employees. This result was attributed to the fact that poor households lacked the skills necessary for employment in sectors that export and reside in remote areas where employment impact is minimal.

Were (2007), in a study on Kenya, examined the impact of trade on employment outcomes in the manufacturing sector using firm-level World Bank data. The results indicate the capacity of export-oriented firms to employ more labour than their non-exporting counterparts, although the disparity is minimized with time. The data further shows that between the early 1990s and 2003, the proportion of employees in exporting firms as a percentage of total employment decreased by more than 20%. The results also indicated that exporting did not have a significant impact on the number of temporary workers a firm employed, although the number of temporary workers in firms that export was comparatively more. In Ghana, Söderbom and Teal (2004) used a historical comparative approach and disaggregated employment by sector to demonstrate that growth in employment was consistently greater in exporting sectors than in import-substitution sectors.

Ertena et al. (2019), in a study on Trade Liberalization and Local Market Adjustment in South Africa, examined the causal effects of tariff reforms implemented in South Africa between 1994 and 2004 on individual labour market outcomes. Their findings indicate that workers in districts facing larger tariff reductions experience a significant decline in employment, led primarily by a decline in employment in the manufacturing sector, in comparison to workers in districts with smaller tariff reductions. The study also found no evidence of labour reallocation from manufacturing to other traded sectors, such as mining and agriculture, or non-traded services. Rather, displaced workers were found to be more likely to become discouraged unemployed workers or to leave the labour force altogether, as well as to have a greater propensity to participate in government transfer programs.

## 4.3 Stylized Facts on Trade and the Labour Market in Africa

Several characteristics of the African labour market may affect how local economies respond to increased trade. In the majority of African nations, unemployment is on the rise, especially among young people. The rising unemployment rate makes it difficult for workers displaced by unfavourable trade shock as a result of free trade find new employment opportunities due to the labour market's large number of job seekers. Also, the inflexibility of wages due to the activity of trade unions and formal bargaining mechanisms in the determination of wages in most countries in Africa create institutional constraints which may limit firms' response to trade shocks along the wage margin (Godfrey et al., 2007; Magruder, 2012). Despite this, there is the capacity to absorb workers who are displaced from formal sector employment due to the existence of a sizable informal sector and minimal entry barriers in a number of countries. In addition to a relatively underdeveloped manufacturing sector, these distinctive characteristics of the labour market indicate a pattern of adjustment to freer trade that may be quantitatively and qualitatively distinct from that observed in other developed regions.

In a world that is rapidly ageing, Africa's young population and rapidly expanding labour force could be a priceless asset. The challenge for many of the nations, however, has been to sustain economic growth in order to generate sufficient employment opportunities for the large number of young people who enter the labour force each year. Nonetheless, the other critical issue is whether or not the Africans entering the labour market, in growing number, possess the necessary skills to be productive in employment. According to Nelson and Phelps (1966), the quality of a nation's labour force or its human capital is correlated with its adaptability, productivity and capacity for innovation.

The growth of small and medium-sized enterprises (SMEs) in Africa is known to be hindered by a lack of education and experience, which prevents firms from capitalizing on trade opportunities. In spite of this, the continent's educational standards have improved over the past two decades, as the proportion of the population with a completed primary education has steadily risen (Twumasi Baffour et al. 2022). Yet, as shown in Fig. 4.1, the rate of primary education completion continues to lag behind the levels of the world, particularly upper middle-income countries.

Despite the existence of important country level heterogeneities, Fig. 4.2 indicates that overall, unemployment is higher in Africa relative to other parts of the world and that it is particularly higher among skilled workers in Africa. Indeed, unemployment among people with advanced levels of education is highest in Africa compared to other regions of the world. Interestingly, although unemployment is high among people with low education in most parts of the world, which is what is expected due to the overall lack of skills of

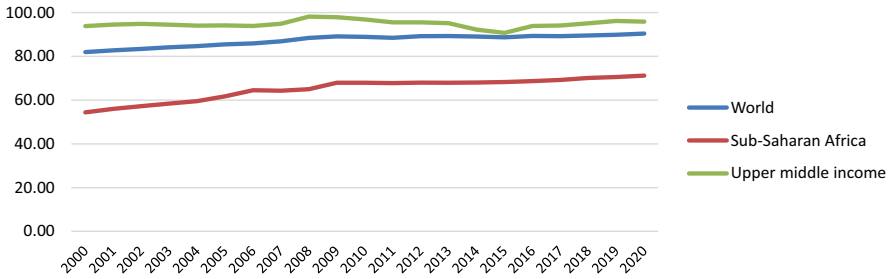


**Fig. 4.1** Primary education completion rate. (Source: Computations by the author based on data from the World Bank)

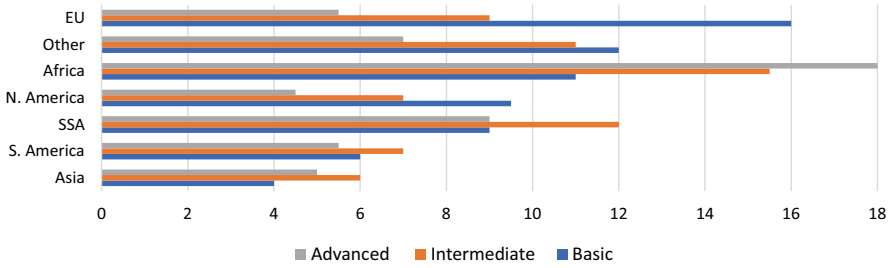


**Fig. 4.2** Average unemployment by levels of education, 2007–2017. (Source: Computations by the author based on ILO data)

persons within this category, the situation is rather the reverse in Africa, as unemployment is higher among the highly educated.

Overall, labour force participation in SSA is among the highest in the world with a participation rate of almost 67% as shown in Fig. 4.3. Yet, for Africa as a whole, the lower female participation rate in North Africa reduces the overall participation rate in the region. The high unemployment rate in SSA, particularly among skilled workers, poses a challenge when it comes to the possible transformational impact that is inherent in increased trade as individuals who become unemployed due to trade would have to join a large pool of the unemployed which could lengthen the duration of unemployment as people find it difficult to find new jobs.

Moreover, there is an overall lack of flexibility in the formal labour markets in Africa. Although informality remains widespread in Africa, the widespread incidence of unionization coupled with collective bargaining point to a high level of inflexibility in the formal labour market relative to other regions. Labour union participation rates measured by trade union density rates, as shown in Fig. 4.4 in Africa, are among the highest in the world, slightly above that of the level of the European Union while the prevalence of collective bargaining in Africa is comparable to other regions of the world. Based on estimates of the ILO which puts 14% of the labour market in Africa to operate in

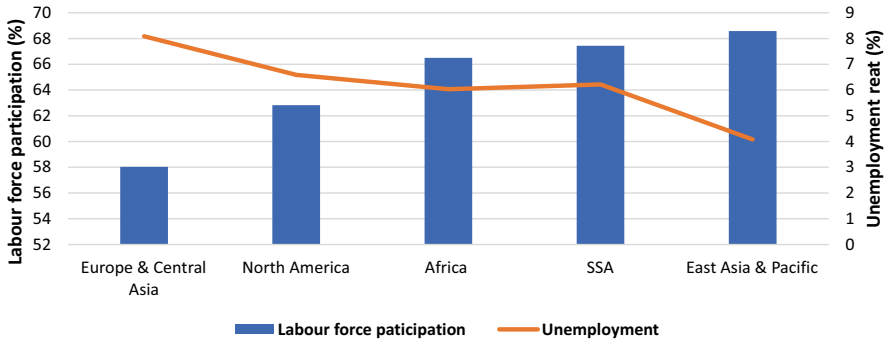


**Fig. 4.3** Average labour force and unemployment: 2008–2021. (Source: Author's computation based on ILO data)

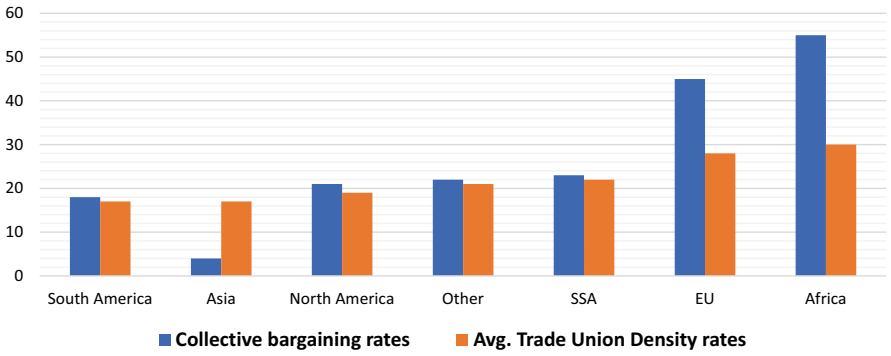


**Fig. 4.4** Collective bargaining and trade union density, averages 2008–2016. (Source: Author's computation based on ILO data. *EU* European Union; *SSA* sub-Saharan Africa)

the formal sector where unionization and collective bargaining exist, comparable levels of union density and collective bargaining rates with other regions of the world where the formal sector dominates the labour market are indication of the low level of labour market flexibility in Africa. These features have important implications on the employment generation potential of increased trade in Africa. This notwithstanding, the dominance of the informal sector in Africa also has the potential to enhance the level of flexibility in the labour market. According to the ILO, 86% of employment in Africa is informal, compared to 69% in Asia and 40% in America (Kuhn et al., 2018). This is an indication that the labour markets in general may be more flexible than suggested by the formal sector, although the lack of flexibility in the formal sector could still pose a significant challenge in labour reallocation following increased trade by the lowering of trade barriers.

## 4.4 How Can Regional Integration Facilitates the Labour Market in Africa?

Trade theories traditionally presume that labour markets are frictionless, which entails seamless mobility within internal labour markets with little/no impact of trade on total employment. If there are no rigidities such as high search costs, minimum wage legislation, trade unions, among other rigidities, increased trade due to openness would have no effect on employment. When barriers to trade are lowered and relative prices of products change, in these models, some sectors grow while others decline, a perfectly mobile labour force reallocates across (or within) sectors, and wages adjust without affecting overall employment.

In recent times, literature has established that increased trade liberalization results in transitional unemployment, but they do not provide convincing evidence of labour reallocation across industries. Although increased trade openness is associated with higher output over the long term, sudden increases in imports have been linked to increased unemployment over the short and medium term. As Pavcnik (2017) demonstrates, frictions that impede the movement of employees' industries, firms, or locations are crucial to comprehending the effect on unemployment. Evidence based on models of partial equilibrium indicate that such frictions can be substantial, and in some instances (countries), the negative effects of trade liberalization on local labour markets have persisted years after liberalization (Karingi and Mevel, 2012; Pavcnik, 2017). Also, partial equilibrium models demonstrate that a large number of trade-induced labour reallocation occurs within industries, from less productive firms to more productive ones, rather than between industries (Wacziarg & Wallack, 2004).

Abrego et al. (2020) employed a Computerized General Equilibrium (CGE) model and assumed for changes in overall employment to estimate the employment effect of in Africa and found that AfCFTA will generate a 1.2% increase in employment in the long term. The model's static nature, however, does not account for the dynamics of the new long-term transition to equilibrium. This notwithstanding, although it seems possible that reduced trade barriers under AfCFTA will result in higher long-term employment levels, the dynamics of the transition could be more complex and include transitional unemployment, given the characteristics of the African labour market.

Evidently, it is a challenge to analyse the possible effects of the AfCFTA agreement on employment in the short to medium term without using a dynamic model that considers the important transitions.

Usually, due to the skill-biased nature of firms within the export sector, expansion in the activities due to increased trade may not absorb most of the unskilled labour that are equally displaced through trade and may be less conducive to growth in unskilled labour (Dunne et al., 2004), yet, the thriving informal sector has the potential to absorb the unskilled displaced labour. Essentially, for member countries to fully benefit from AfCFTA, they must

adopt policies that promote inclusive growth based on diversification and export promotion to reduce the potential negative distributional and labour market effects of trade.

Although increased trade has the potential to increase employment and decrease unemployment in Africa, the outcome will primarily depend on the degree to which African nations are prepared to position themselves to take advantage of the opportunities created by trade, particularly the AfCFTA. Consequently, additional research is required to comprehend all the opportunities inherent in AfCFTA, particularly in terms of the effect on employment.

## 4.5 Conclusion and Policy Recommendations

Although trade among African countries remain low, available data shows an improvement in recent times. Unemployment remains high, particularly among young people with advanced education in Africa relative to other regional blocs in the world. As a result, trade, in particular AfCFTA, offers a great opportunity to create jobs, improve labour market conditions and spur growth in member countries. This notwithstanding, African countries must develop appropriate export promotion policies to identify new opportunities for diversification, development of value chains and industrialisation in general to harness the full benefit of trade. This could be achieved through a comprehensive industrial policy that is intentional on employment generation through trade.

In addition, countries must adopt inclusive growth policies to reduce the potential negative distributional and labour market effects of increased trade. These should include policies to improve the flexibility of the market by easing restrictions to facilitate labour reallocation across sectors while moderating distortions in labour cost to enable seamless transitions in the labour market. More importantly, countries must focus and invest in education and skills training and retraining in order for the labour force to utilize opportunities associated with increased trade and remove barriers to labour mobility. It is evident that with open trade comes resource reallocation, and in the labour market, this results in a situation where workers in importing sectors lose jobs; while work opportunities are created in exporting sectors, opportunities for skills training and retraining would help with such transitions across jobs and occupations.

Evidence in other regions of the world point to an overall persistence of transitional unemployment to trade liberalization. Africa could learn from this through the enhancement of social protection programmes to mitigate possible adverse effects of increased trade through AfCFTA. Also, targeted programmes that will create opportunities for retraining and reskilling will be essential to facilitate labour mobility across sectors while preventing long-term negative impact of unemployment and inactivity in the labour market.

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CHAPTER 5

# Structure, Composition, and Trends in African Trade

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## 5.1 Introduction

Trade as a research theme cuts across many disciplines such as archaeology, history, finance, economics, law, etc. In economics, the earliest indication of a positive association between trade and development can be traced to the work of Smith (1776). Empirical studies based on neoclassical theories further lend support to the earlier assertion of trade driving development. Thus, the predominant view is that trade liberalization boosts technological transfer, poverty reduction, and growth. A liberalized trade regime facilitates the exchange of goods and services among countries, which increases economic opportunities and leads to a long-term improvement in standard of living. Kelbore (2015) asserts that countries with less trade restrictions have faster economic growth than trade-induced closed economies. Through a wider market access, trade provides countries with the benefits of innovation, specialization, and scale economies. Productive trade practices offer poorer countries an escape route out of lower income and poverty and give them a voice on the global stage. Trade offers such countries, including landlocked countries, access to global markets. Trade can also be used as a means of fostering deeper cooperation among countries. For instance, bilateral and multilateral trade agreements

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_5

enhance conflict mitigation tools as trade partners are less likely to resort to wars. Other benefits of trade liberalization include capital flows attraction through the injection of external capital for productive purposes (Bhatt, 2013). In view of the benefits, countries continue to implement policies aimed at facilitating trade and enhancing their competitiveness. According to Chimilila et al. (2014), trade facilitation is where deliberate efforts are made to overcome hurdles inhibiting trade between countries.

However, trade liberalization also has its downsides such as crowding out local investments and worsening current poverty levels (Yameogo & Omojolaibi, 2021). For poor countries, they may be subjected to unfair trade practices such as dumping, protectionist policies, and so on. Again, many poorer countries may not have the infrastructure such as access to ports, to compete at the global level. Studies suggest that developing countries have one of the highest costs of trading compared to developed countries. Ineffective import and export procedures are identified as major contributors to high cost of trading.

The positive and adverse impacts of trade support the assertion that the exact impact of trade on an economy is far from being conclusive as both theoretical postulations and empirical opinions have been varied. The directional effect of trade has been known to be more dynamic in nature. In a survey of empirical works, Baldwin (1984) reports of findings with less emphasis on the static impact of trade. This explains why the nature, composition, structure, and directional movement of trade, especially its association with economic development, have been a long-standing subject of interest to legislative bodies, policy experts, and academics.

Further to the dynamic nature of trade, it is also essential that issues of trade are looked at in a poly-crisis context characterized by global shocks including the ravaging impacts of COVID-19, the Russia–Ukraine war, spiralling inflation, high interest rates, the Israel–Hamas war, and ever heightening geopolitical tensions. Innovation and digitalization, climate change, the surge in services, non-tariff measures, regional trade blocks, trade in natural resources, risks and shocks, and the recent political instability within Central and West Africa must be of concern to global trade partners. For instance, the World Trade Organization (WTO) (2021) notes that, even though global trade proved to be resilient than many had anticipated during the outbreak of the COVID-19 pandemic, the pandemic brought unprecedented supply chain disruptions and shocks to trade among countries. Accordingly, Baker et al. (2020) contend that the impact of COVID-19 on global markets far outweigh that of any other infectious disease in history, including the Spanish flu. Yet, WTO (2021) acknowledged the facilitating role of trade in the distribution of critical medical supplies, Personal Protective Equipment (PPEs), and consumables at the height of the pandemic. Manufacturing and distribution of PPEs surged as a response to the pandemic. Further, given the potential adverse impact of climate change on the global economic system, WTO (2022) sought to examine the multidimensional association between climate change and trade. The report looked at the potential adverse effects of climate on global trade and how trade

could also worsen climate—hence, the report notes the intertwined nature of climate change and trade.

This chapter discusses issues relating to African trade, including its structure, composition, and trends. Specially, the chapter examines the trade and its composition during the periods before and after independence. It then sheds light on trade within the continent and what the key drivers are, in terms of region and products. Given the increasing importance of the service sector in current global trade, the chapter further examines whether industrialization and value addition are a relevant agenda for Africa to pursue. The chapter concludes with the potential of the AfCFTA for African trade.

## 5.2 Africa's Trade and Its Composition—Pre- and Post-Independence

History documents trade between Africa and the rest of the world at certain time periods, which can be traced to the nineteenth and twentieth centuries. According to Chirikure, trade in Africa could be seen as a cultural phenomenon that promoted the exchange of ideas and commodities between communities and individuals, though it was also facilitated by necessity and scarcity or abundance of resources. To look at Africa's trade under different time spans, we used the periods before 1960 to capture pre-independence and the year 1960 onwards as post-independence as by that time, all the major colonial rulers had granted independence to majority of their colonies. The year 1960 saw a wave of independence with as many as 17 countries south of the Sahara, attaining independence.

This section draws heavily on the book, History of African Trade, by Acheampong (2015). The report suggests that regional trade in precolonial Africa was underpinned by the exchange of ecologically specialized goods and not the production of similar goods. *The economic fortune of African communities was so hinged on the reciprocal gains associated with regional trade, that scholars of the pre-European contact dispensation pointed out that external conquest was counter-productive with emerging regional systems driven by heterarchy as compared to hierarchy.*[1] Africa was self-sufficient in material production, and this contributed to the relative difficulty Europeans faced in breaking into African trade.

The emergence of Euro-African trade, especially the slave trade that elevated the use of firearms and liquor as exchange products, contributed to the disruption of the African production and brought a sense of insecurity—which made the cheaper metals and textiles Europe brought to the continent more attractive. Accordingly, African crafts including smelting, for example, declined as blacksmiths worked on imported metals and local iron for trade. This ushered in the era of economic dependency of Africa on Europe and the West. Driven by an imagined wealth they possessed in natural resources and people,

[1] Acheampong (2015), *The History of African Trade*, Afreximbank.

Europeans raced for tropical territories at the end of the nineteenth century—and the role of economics in the scramble and partition of Africa is instrumental.

The era of colonization witnessed the introduction of monocropping pattern for African economies, in addition to elevated cash-crops which were exported over food crops. This undermined Africa's attempts at manufacturing and contributed to stifling intra-African trade. In this regard, the African continent was integrated into global trade, but mainly as producers of raw materials in exchange for finished and manufactured goods. The early decades of African independence—the 1960s and 1970s—saw African attempts to diversify their agricultural base, create a manufacturing base, and restore intra-African trade, especially through regional trading blocs such as the Economic Community of West African States (ECOWAS). Notwithstanding these efforts, owing partly to the colonial legacy where the colonies produced raw materials for export to the metropolis in exchange for manufactured goods, and partly on account of the World Bank's insistence on African economies to pursue comparative advantage, development has remained elusive. Additionally, development partners including international development agencies have been keen on seeing Africa continue to produce primary commodities for exports that characterized the colonial economy to ensure the African continent's continuous dependence on the developed North.

With one of the richest natural endowments in the world, creating greater value-added from these endowments has remained a major challenge. The content of Africa's trading basket has not changed—commodities and natural resources for reasons highlighted earlier. Most economies in the continent export commodities across the world for further processing and in return, import manufactured and finished goods for consumption—at prices many times their export. In addition to adverse commodity terms of trade shocks, undue exposure to commodity price volatility leave most countries with balance of payment challenges. The African Continental Free Trade Area (AfCFTA)—which will be discussed subsequently—is expected to contribute to creating regional value chains—with a view to ensuring less dependence on import of essentials including pharmaceutical and processed agricultural products.

In an era of zero-sum game where trade is dominated by manufactured goods, over-reliance on primary commodities and natural resource export continues to expose the continent to commodity terms of trade shocks with attendant liquidity constraints and macroeconomic management challenges. It is this context that raises the urgent need for industrialization and manufacturing promotion in Africa to improve the continent's competitiveness and better integrate into global supply chains—and in so doing, increase its share in global trade which has remained below 3 percent.

## 5.3 Intra-African Trade—Key Drivers in Terms of Country and Product

Intra-African trade remains relatively small, especially when compared to Africa's trade with the rest of the world. Available data shows that Africa's global trade share was only 2 percent between 1995 and 1999, a figure that marginally increased to 3 percent from 2011 to 2017 (Kassa et al., 2022). However, there is a positive trend as the share of intra-African exports as a percentage of total African exports has risen from about 10 percent in 1995 to approximately 16 percent in 2022. From 2000 to 2017, food and manufactured goods constituted most of the products traded within the continent, while primary products dominated exports from Africa to the rest of the world.

Several factors contribute to this limited intra-African trade volume. One major factor is the imposition of high tariffs among many African countries (Luke, 2019). According to Luke (2019), businesses currently face higher tariffs, averaging around 6.1 percent, when exporting within Africa than when exporting outside the continent. Moreover, African borders are hindered by non-tariff barriers (NTBs) that cause delays and slow down trade, including cumbersome and excessive document requirements, inefficient ports, and underdeveloped infrastructure, all of which increase trading costs within Africa (Kassa et al., 2022). Another potential reason for the small intra-African trade volume is the limited tariff and quota benefits that African exports receive from major global trading arrangements, such as the US African Growth and Opportunity Act, the EU's Everything but Arms, and the UK's Developing Countries Trading Scheme (Generalized Scheme of Preferences).

It is important to highlight regional disparities in the volume of intra-African trade, including within various Regional Economic Communities (RECs). Research has revealed that the Southern African Development Community (SADC), the East African Community (EAC), and the Economic Community of West African States (ECOWAS) stand out with the highest share of intra-REC trade, alongside the Common Market for Eastern and Southern Africa (COMESA) (UNCTAD, 2022). In other words, substantial cross-country trade occurs within these RECs, while trade between countries across different regional trading blocs remains limited (Kassa et al., 2022). For instance, a recent study found that between 2011 and 2017, 85 percent of the trade of SADC member countries within Africa took place with other SADC member countries, and 70 percent of the trade with ECOWAS countries within Africa was with other ECOWAS member countries (Kassa et al., 2022).

Despite the historical insignificance of trade within Africa, it is widely acknowledged that there is a significant untapped potential for its expansion. Africa represents a significant economic opportunity, boasting a gross domestic product (GDP) of US$2.5 trillion and a population of 1.2 billion people, a number projected to reach 2.5 billion by 2050. Moreover, it is anticipated that Africa will account for 26 percent of the world's working-age population at that time (UNECA, 2021). These vast demographic and economic scales

create a promising market that can harness its abundant resources and opportunities.

Africa's expanding consumer base, notably the emergence of a growing middle class, and the increasing trend of business-to-business consumption combined, makes the continent an enticing prospect for trade and investment (Muchanga, 2020). To capitalize on these prospects, the African Continental Free Trade Area (AfCFTA) is being implemented, aiming to reduce or eliminate non-tariff barriers and liberalize tariffs. This initiative seeks to make intra-African trade more accessible and profitable, paving the way for a brighter economic outlook across the continent. Geda and Yimer (2023) examine the potential impacts of the tariff reduction protocol within the AfCFTA on intra-African trade in goods. Using trade indices and a gravity model, their findings indicate that the AfCFTA has the potential to elevate intra-African exports from the mean annual value of US$ 72.7 billion (during 2015–2017) by approximately US$ 13.7 billion, representing an increase of about 19 percent.

## 5.4 Current Dynamics in African Trade and the Rise of South-South Trade

Currently, intra-African trade accounts for a mere 14.4 percent of the total African exports. Projections from UNCTAD indicate that the African Continental Free Trade Area (AfCFTA) has the potential to increase intra-Africa trade by approximately 33 percent while simultaneously reducing the continent's trade deficit by 51 percent.

According to Luke (2023), Africa's export composition differs based on the destination market. For instance, in developed markets like the EU, US, and UK, exports are mainly fuels and manufactured goods. In emerging markets like China and India, fuels, ores, and metals dominate. However, smaller markets show variations. Highly developed nations like Canada, Korea, and Japan import fuels and metals from Africa, while Africa exports more manufactured goods to emerging markets like Turkey and Brazil. Fuel-exporting countries in the Middle East and Russia import fewer fuels from Africa.

### *5.4.1 The Rise of South-South Trade*

The growth of South-South trade has been remarkable, with its value surging from USD 600 billion in 1995 to approximately USD 5.3 trillion in 2021. This expansion has resulted in South-South trade accounting for a larger portion of global trade. In 2021, it represented 24.4 percent of world trade, and by mid-2022, there was a remarkable 50 percent increase in South-South trade volumes compared to 2019. In contrast, trade between developed nations increased by only 28 percent during the same period, as reported by the United Nations Conference on Trade and Development (2022). South-South trade now surpasses North-South trade in volume, exhibiting a robust growth rate of

9.8 percent on average during the 2000–2021 period, which is notably faster than the global average during the same timeframe (UNCTAD, 2023). This dynamic expansion indicates the emergence of fresh trade prospects, including the potential for interregional trade among regions and countries that had not engaged in trade previously. Moreover, it opens more avenues for producers and small- and medium-sized enterprises (SMEs) in developing economies to capitalize on reduced market entry barriers and heightened competitiveness (Mohanty et al., 2019; ITC, 2020).

### *5.4.2 Current Dynamics in African Trade and the Rise of South-South Trade*

Numerous empirical studies have been undertaken to shed light on the evolving dynamics of trade within the African continent, particularly focusing on the rising phenomenon of South-South trade. These studies provide a comprehensive understanding of the contemporary trade landscape in Africa, emphasizing the significant shifts and developments that have unfolded in recent years.

Jolly and Verma (2023) analysed the trade patterns among developing economies on a global scale using data from the UN database for selected countries over the period from 2011 to 2020. The findings of their study indicate that the ratio of exports from South countries to world exports remained stagnant during the first half of the 2011–2020 period and increased during the latter half of the decade. Calderón et al. (2020) conducted a study on the impact of trade integration on economic growth in Sub-Saharan Africa employing the GMM-IV system estimator. Their findings suggest that trade integration has a positive influence on the region's economic growth, thus supporting the notion that greater trade integration can bolster economic development in Sub-Saharan Africa.

A study conducted by UNDP highlighted positive trends in the growth and development of the global South, including economic growth and improved human development indicators. South-South Cooperation exceeded $20 billion in 2013, fostering diverse opportunities for development collaboration. International conferences and agreements, such as the Third International Conference on Financing for Development and the Sustainable Development Goals (Goal 17), emphasized the importance of South-South and triangular cooperation. These collaborations play a vital role in addressing development challenges and climate change.

UNCTAD analysed the increase in South-South trade from 1995 to 2005. The study used data from the "UNCTAD South-South Trade Information System (SSTIS)" and categorized developing countries into 14 subregions. The findings from this study revealed that the percentage of exports to other Southern countries, as opposed to total exports, varied widely, ranging from a low of 9 percent in Central America to a high of 56 percent in South-East Asia. Notably, most subregions, except for the Caribbean and Central America, experienced an increase in their export share to Southern regions during the

period from 1995 to 2005. The study highlighted the importance of various factors that reduce overall trade costs, including geographical proximity, cultural similarities, and historical trade connections. These factors played a role in facilitating trade even among subregions with seemingly low trade complementarity. In the global commerce landscape, East Asia and South-East Asia emerged as major exporters of higher-value-added manufactured goods. However, the study suggested that South-South trade presented numerous opportunities for production and export diversification, especially for countries beyond East and South-East Asia, as evidenced by the significant growth in South-South exports from Africa.

Bernhardt (2016) examines the growth of South-South trade and its theoretical implications. He uses econometric analysis to study the "income elasticities of import demand" in trade interactions between emerging Asian and South American countries and major Northern markets. His findings suggest that South-South trade could drive development, particularly in Asia, where income elasticities of import demand are relatively high. However, South America does not share the same level of attractiveness for South-South trade. Importantly, the author highlights the importance of developing countries strengthening economic ties with each other and implementing policies that facilitate such trade for mutual growth and development.

## 5.5 The Case for Industrialization and Value Addition

Industrialization and value addition have been strongly connected to the rise of many developed nations through trade. Manufacturing is a critical component of industrialization as per the World Bank Development Indicators. Africa's critique has been that it exports most of its natural resources in their raw state without any value additions. Global industrialization had its share of the adverse impact of COVID-19 and its disruptions, though the impact varies across regions, industries, and firms. While recovery was quick for some, it was slow for others, with several countries still struggling to achieve pre-Covid-19 growth rates. According to IDR Industrialized economies (IEs) were less affected compared to developing and emerging industrial economies (DEIEs), and vulnerable industries (labour- and capital-intensive industries) could not recover quickly compared to robust industries (food and chemicals, pharmaceuticals, computers, and medical equipment). Again, the impact on small and medium enterprise enterprises was more severe compared to large firms, while firms outside manufacturing were much hit by the pandemic. Manufacturing firms were found to be very robust in the wake of the pandemic and may recover quicker.

### *5.5.1 Global Trade and Value Additions*

Regarding trade, Miroudot & Cadestin (2017) provide insights into the critical role of services within global value chains (GVCs). Their study, which utilized data from the Trade in Value Added database, revealed that services have a more substantial impact on global trade than traditional statistics might suggest. However, it is important to note that this evidence only presents a partial view of the significance of services in GVCs. In addition to procuring services as inputs, manufacturing companies also engage in various service-related activities. Moreover, these manufacturing firms are increasingly involved in the production and export of services, either as complements or substitutes for their physical goods. This shift towards services aligns with strategies aimed at enhancing value and cultivating long-term customer relationships. Their study underscores those services, whether obtained domestically or from abroad, make up approximately 37 percent of the total value of manufacturing exports in the examined countries. When considering service activities conducted within manufacturing firms, this figure increases to 53 percent, and the overall contribution of services to exports approaches two-thirds. Across different countries, service support functions, such as research and development, engineering, transportation, logistics, distribution, marketing, sales, after-sales services, information technology, management, and back-office support, constitute a significant portion of employment within manufacturing firms, varying between 25 percent and 60 percent.

Saha and Shaw (2019) offer a comprehensive analysis of industrialization within the context of Sustainable Development Goal 9 (SDG 9). They highlight a significant disparity in per capita manufacturing value-added between industrialized nations and Least Developed Countries (LDCs), emphasizing the urgent need for sustainable practices in industrialization. India, despite its substantial and diverse industrial base by global standards, faces challenges in achieving global competitiveness across various sectors. This stagnation negatively impacts India's GDP share and, consequently, the quality of economic growth, particularly concerning employment generation. The authors advocate for a reorientation of India's industrialization efforts, emphasizing the importance of building knowledge capacities to adapt to rapidly evolving industrial trends. They delve into the possibilities for deepening industrialization in India, considering current priorities and future requirements. Furthermore, they explore the development of an indicator framework relevant to SDG 9, which can serve as a valuable tool for evaluating progress in industrialization within the Indian context.

Doroshenko et al. (2021) conducted a comprehensive theoretical examination of the correlation between industrial growth and innovation within the context of the Russian economy. They successfully identified the challenges hindering industrial growth in Russia while proposing a set of tools founded on evaluating a region's level of industrialization and its innovative capabilities. Through this analysis, four distinctive models of industrial and innovative

development emerged: the non-industrial development model, the post-industrial development model, the neo-industrial development model, and the industrial development model. Their findings revealed that the categorization of Russian regions based on their industrial-innovative development models remained relatively stable, yet progress was notably lacking. Remarkably, only one-third of these regions exhibited a high level of innovative performance. This lack of equilibrium between industrial potential and innovative productivity in Russian regions could be attributed to the suboptimal efficiency of implemented industrial policy measures.

Mallalieu et al. (2022) conducted a comprehensive investigation into the incorporation of digital infrastructure within the context of Design for Additive Manufacturing (DfAM) methods and tools using a systematic literature review as their methodological approach. This thorough review revealed a noteworthy deficiency in the attention given to digital infrastructure in current DfAM methodologies and tools. The findings of the study revealed that prevailing practices contribute negatively to the industrialization process, primarily due to the excessive time and effort invested in non-value-adding activities. It is evident that the data generated and analysed during the additive manufacturing (AM) process must be integrated into the DfAM activities to unlock the full potential of the AM process while minimizing unnecessary inefficiencies.

Bokosi (2022) investigated the impact of industrialization on economic growth within the context of six Southern African countries spanning the years 1978 to 2019. To analyse this relationship, the author employed a variety of econometric methods, including pooled mean group, mean group, and dynamic fixed effects. Manufacturing value added served as the proxy for industrialization in this study. The empirical results from this investigation revealed a positive association between an increase in industrialization and economic growth, both in the short term and over the long run. Notably, this positive relationship became even more significant when common correlated factors were included to address the issue of cross-sectional dependence.

### *5.5.2 African Trade and Industrialization*

Studies have shown that Africa's growth and transformation is dependent on growth of its real sector that is growth hinging on improved manufacturing, industrialization, service agriculture (Africa Union, 2015; Page 2013; Dinh et al., 2012). The relevance of the real sector to the overall growth of Africa cannot be underestimated as the real sector holds the key to Africa's economic transformation. According to Loayza and Raddatz, growth in agriculture, construction, and manufacturing is critical for poverty alleviation. Given that Africa is already known for its agricultural prowess, it is critical that attention is shifted to manufacturing and industrialization. This was echoed by Opoku and Yan (2019) on a data of 37 African countries. They contend that industrialization and manufacturing are essential for Africa's sustainable growth and transformation. To this end, African countries need policy initiatives such as the Government

of Ghana's one district one factory programme, to engineer the wheels of industrialization. Accordingly, ECA (2017) posits that, when Africa can sustain structural economic transformation, its efforts are directed from just agricultural production to high processing manufacturing productivity. The call is appropriate given that the once vibrant agricultural sector is on the decline. With manufacturing and industrialization, value will be added to the output from the agricultural sector. The issue of industrialization and value addition is echoed in one of the general objectives (promote industrial development through diversification and regional value chain development, agricultural development, and food security) of AfCFTA. Again, article two of the AfCFTA agreement document also notes that: "The specific objective of this Protocol is to boost intra-African trade in goods, through enhanced socio-economic development, diversification and industrialization across Africa." Thus, value addition and industrialization are critical components of African trade.

Using growth in manufacturing as the proxy for industrialization, Gui-Diby and Renard (2015) strike a positive connection between FDI and industrialization. They show that, with the right intervention and policies aimed at promoting a conducive environment for businesses, FDI can improve Africa's industrialization drive. On a study of 19 countries, Kodongo and Ojah (2017) found that, where there is financial sector credit, FDI has a positive impact on industrial sector value additions. Again, on FDI, Asamoah and Alagidede (2023) on a data of 30 African countries document that, with an instrumental variable estimation technique, FDI had no initial impact of manufacturing and industrial value addition and that it is only at rising levels of financial development will there be a positive effect.

Asamoah and Alagidede (2020) have also documented a positive connection between portfolio investments and growth in manufacturing and industrial value additions. In a similar study, Asamoah et al. (2021a) note that equity and debt flows are only beneficial to manufacturing and industrial value additions only when the financial system is developed up to a particular point. Similarly, Asamoah et al. (2021b) note, its only when institutions are effective that private capital flows can boost industrialization in Africa. It only suggests that certain domestic absorptive capacities need to be in place regarding the issues of industrialization and value additions in Africa. This is needed to combat Africa's low share of global manufacturing. According to UNIDO, Africa's share of global manufacturing was only 4.4 percent in 2016, while the Asia Pacific region controlled 76 percent.

## 5.6 The Promise of the AfCFTA

The African Continental Free Trade Area (AfCFTA) saw the launching of its operational phase on 7 July 2019, nine years after the adoption of the agreement and its opening for signature in January 2012 at the 18th ordinary Session of Assembly of Heads of State and Government, held in Addis Ababa, Ethiopia, with the unanimous view that the AfCFTA is critical for boosting

intra-African trade. On the roadmap towards the AfCFTA, the negotiations for the establishment of Agreement were first launched at the 25th ordinary session on the African Union Heads of State meeting in Johannesburg. In 2018 in Kigali, 44 out of the 55 AU members signed the agreement that established the AfCFTA. This was at the 10th extraordinary session of the African Union. The agreement then entered into force in 2019 with the 22nd deposit of the instrument of rectification by the Saharawi Republic. Two months after the entry into force, that is, July 2019, the operational phase of the agreement was launched at the 12th extraordinary meeting of the AU in Niamey, Niger. In 2020, the first secretary general of the AfCFTA was elected at the 33rd ordinary session of the AU and sworn into office in the same year. The AfCFTA secretariat was also commissioned and handed in 2020. Trading officially started on 1st January in 2021.

The call for such a union was echoed by the first president of Ghana and the then Organization of Africa Union (OAU) Summit in 1963, where Dr. Nkrumah opined that "Unite we must. Without necessarily sacrificing our sovereignties, big or small, we can here and now forge a political union based on Defense, Foreign Affairs and Diplomacy, and a Common Citizenship, an African Currency, an African Monetary Zone, and an African Central Bank. We must unite in order to achieve the full liberation of our continent." Fifty-eight years down the line, the establishment of a continental free trade area or Africa as trading bloc was long overdue given that other regions of the world had done so long ago. The Association of South-East Asian Nations (ASEAN) was established in 1967, European Union in 1951, North America Free Trade Agreement (NAFTA) in 1994, and MERCOSUR (Mercado Comun del Cono Sur), which means Southern Common Market for South American countries, was established in 1991. Other blocs such as BRICS were set up in 2009. There are also blocs within Africa which are classified as regional or trade blocs, such as Union Maghreb Arab (UMA), Common Market for Eastern and Southern Africa (COMESA), The Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), and Southern African Development Community (SADC), set up as means of facilitating trade and movement of people among themselves.

Despite the four blocs within the continent, there was the need for a regional trade area. This became one of the key flagship programmes under African Union's Agenda 2063. Under Agenda 2063, AfCFTA was set up to boost trade within the continent and make Africa relevant in the global market space and give Africa a unified and stronger voice at negotiations table on the global stage. With the establishment of the AfCFTA, Africa now has the largest regional bloc in terms of trade. The continent also has a lot to offer at the international trade space now that it has a stronger bargaining power, larger access to market, quality goods for export, strengthening domestic institutions and development of its financial sector. A successful implementation of the AfCFTA can attract substantial foreign investment to the continent. An African continental trade has the potential to revolutionize Africa's dwindling real

sector while shifting the dependence from natural resources and the extractive industry. With African continental trade, investors doing business with Africa have the advantage of a well unified and coordinated market of 1.2 billion people, 54 countries and 46 state parties having signed the agreement. Expectations are that this market size in terms of population will grow to an estimated value of 2.5 billion by 2050. Within this context, it is the hope that a successful AfCFTA programme will lift over 30 million people from extreme poverty and more than 68 million from moderate poverty if barriers inhibiting trade in Africa are eliminated.

### *5.6.1 The Objectives of AfCFTA*

According to AU (2018), the objectives for setting up a continental free trade area are grouped into general and specific objectives. According to Article 3 of the agreement establishing the African Continental Free Trade Area, the general objectives are as enshrined below:

- Create a single market for goods, services, facilitated by movement of persons in order to deepen the economic integration of the African continent and in accordance with the Pan African Vision of "An integrated, prosperous and peaceful Africa" enshrined in Agenda 2063.
- Lay the foundation for the establishment of a Continental Customs Union at a later stage.
- Create a liberalized market for goods and services through successive rounds of negotiations.
- Contribute to the movement of capital and natural persons and facilitate investments, building on the initiatives and developments in the state parties and RECs.
- Promote and attain sustainable and inclusive socio-economic development, gender equality, and structural transformation of the state parties.
- Promote industrial development through diversification and regional value chain development, agricultural development, and food security.
- Enhance the competitiveness of the economies of state parties within the continent and the global market; and
- Resolve the challenges of multiple and overlapping memberships and expedite the regional and continental integration processes.

Aside from the general objectives stated above, Article 4 of the Agreement provides specific objectives. These specific objectives are aimed at party states. According to Article 4 of the Agreement, party states shall:

- progressively eliminate tariffs and non-tariff barriers to trade in goods;
- cooperate on investment, intellectual property rights, and competition policy;
- progressively liberalize trade in services;

- cooperate on customs matters and the implementation of trade facilitation measures;
- cooperate on all trade-related areas;
- establish and maintain an institutional framework for the implementation and administration of the AfCFTA; and
- establish a mechanism for the settlement of disputes concerning their rights and obligations.

As of August 2022, 43 state parties had ratified the agreement.

### *5.6.2 Benefits of the AfCFTA*

Regarding the benefits of the AfCFTA, many studies have documented what countries stand to gain from policies such as the attraction of capital flows. According to Zwanbin (2023), AfCFTA can catapult Africa into industrialization, economic growth, and sustainable development through enhanced intra-African trade. The benefit of AfCFTA will be much realized if the gimmicks and politics of unfair international practices are avoided. It is also essential that internal bottlenecks within the continent including immigration hinderances, terrorism, poor infrastructure, varied regional economic zones, political instability, colonial ties, and economic nationalism are eliminated to realize the enormous benefits AfCFTA brings (Zwanbin, 2023).

At the 2023 AU Summit dubbed Powering Trade through AfCFTA, The AU adopted "Year of AfCFTA: Acceleration of the African Continental Free Trade Area Implementation" as the theme for the summit. AU contends that an AfCFTA programme once successfully implemented, the continent stands to benefit from the following:

- Improved welfare of the citizenry
- Quality of life
- Decent jobs for many
- Help in the attainment of the goals of Agenda 2063

Further on the significance of the African Continental Free Trade Area, expectations include:

- Strengthening intra-African trade.
- Enhancing the capacities of African companies in gaining access to global markets
- Enhancing the commercial and political diplomacy of Africa.
- Strengthening the regional value chains to stimulate the growth of Agro processing and manufacturing sectors across the continent.

- Providing better or greater opportunities for the youth, women, and small and medium enterprise in Africa through the AfCFTA-Guided Trade Initiative.
- Promoting a more sustainable and inclusive development for Africa.

According to Echandi et al. (2022), a successfully implemented AfCFTA will enhance growth, lessen poverty, and reduce the continent's dependence on global commodity cycle. They further posit that an AfCFTA policy will reduce non-tariff barriers, delays at most borders, improve trade facilitation and cost of compliance, making it much easier for African businesses to be integrated to regional and global supply chains. AfCFTA will create a conducive environment for trade in goods and services and promoting healthy competition in trade. The Economic Commission for Africa in its 2023 Economic Assessment of AfCFTA notes that, "*For Africa as a whole, intra-African trade would be about 34 percent higher with the AfCFTA implementation in 2045 as compared to a situation without AfCFTA.*"

Implemented effectively, the AfCFTA can significantly reshape future growth and development of the continent through enabling higher value-added supply chains and a more diversified trading basket, allowing member states to reduce historical commodity dependence and achieve meaningful progress towards its aspirations. A vibrant, efficient, and consciously streamlined intra-African trade is critical for the promotion of industrialization and establishment of value chains in Africa.

## 5.7 Conclusion

This chapter sought to take a shot at African Trade with a focus on its composition and structure. It looked at African trade pre- and post-colonial, intra-African trade, and the promise that AfCFTA brings. African trade is now more essential than ever given the impact of COVID-19 and the Russian-Ukraine war on supplies to the continent. Intra-African trade will reduce dependence on foreign commodity supplies and lessen the potential impact of external shocks on the continent. AfCFTA presents a greater chance to lift many out of poverty. Policy makers, including both domestic and external, including the African Union, Economic Commission for Africa, World Trade Organization, and UNCTAD, should support AfCFTA. As one of the essential pillars of Agenda 2063: The Africa we want, AfCFTA cannot be allowed to fail as the Agreement is vital to change the structure and composition of Africa's trade through industrialisation and accelerate the structural transformation of African economies.

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CHAPTER 6

# Energy and International Trade in Africa

*Jabir I. Mohammed and Amin Karimu*

## 6.1 Introduction

Africa is blessed with many natural resources such as arable land for agriculture, forest resources, minerals, ores such as gold, energy resources such as oil, gas, coal, significant amount of sunlight for solar energy among others. For instance, Ghana, South Africa, and Sudan are major gold-producing countries globally and Libya is among the top ten countries based on proven crude oil reserves. Despite the large endowment of natural resources, Africa as a region is the least developed region among the developing regions of the world based on the latest (2021) United Nations Human Development Index (HDI), which Sub-Saharan Africa recorded a score of 0.547, which is the least compared to 0.632 for South Asia, 0.754 for Latin America and the Caribbean, and 0.749 for East Asia and the Pacific.

In recent growth theories and empirics, energy is considered a key enabler for growth and development, with significant evidence from the developed regions from the start of the industrial revolution to date. Energy is expected to continue to play a key role in the digitalization revolution that is currently

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_6

ongoing, especially electric energy resources. In the history of the developed world, industrialization played a key role in their development, supported by the availability of cheap energy resources. Most African leaders, since independence to date, have been discussing how to promote industrialization to aid diversifying away from primary commodities exports to value-added exports in the quest of achieving accelerated growth and development of their individual countries and the collective development of the region. This, among other things, suggests the important role energy will play in Africa's growth and development now and in the future, despite the growth concerns of climate change and the contribution from fossil energy resources.

In recent years, new discoveries of energy resources, particularly oil and gas, have been found in Africa in large quantities in Tanzania, Uganda, and Mozambique. This shows that the continent is still 'virgin' in many aspects of oil and gas exploration and development (AfDB, 2009). The exploration and development of these resources require significant financial commitments, which most governments in Africa are unable to provide and therefore rely on international oil firms to invest in the exploration and development of such resources based on contracts that are less favorable to the African countries.

Africa's crude oil production in 2021 was about 7.3 million barrels per day (bpd), which is about 8.1% of global production in 2021 (British Petroleum, 2022). Africa is generally a positive net exporter of crude oil and a negative net exporter of refined oil products (Silva & Paixão, 2018) due to limited refinery capacity in the region, which is about 3.2 million bpd in 2021, accounting for about 3.2% of the world's refinery capacity. This, among other things, suggests a significant refinery opportunity in the region, given that demand is expected to rise in the future driven by a growing middle class in the population as growth and development improve.

This chapter presents and analyses the sources of energy in Africa, the structure of energy finance in the region, energy trade dynamics, energy security and trade, challenges of energy security in the region, energy demand and balance of payments in Africa, and energy war and trade. It also concludes and provides policy implications.

## 6.2 Sources of Energy in Africa

Natural resources play a major role in Africa's economic dynamics, particularly in trade, revenue generation, industrialization, transportation, and women's engagement in economic activities due to time constraints imposed by energy access on home production. The region is richly endowed with energy resources. In the case of non-renewable energy resources, Africa's endowment is about 1.4% of global coal reserves as at 2020, 7.2% of world oil reserves, and 6.9% of natural gas reserves in the world (British Petroleum, 2020). The region is also rich in renewable energy resources with almost unlimited solar potential, significant hydro resources (350 gigawatts), wind (119 gigawatts) and geothermal resources (15 gigawatts), and biomass resources (IEA, 2019). These

resources are unevenly distributed within the region, with significant oil resources located mostly in North and West Africa, whereas geothermal resources are located mostly in East Africa and with significant coal deposits in Southern Africa, particularly in South Africa.

Africa's exports since the 1960s have been predominantly based on primary commodities and minerals such as cocoa, tea, coffee, cotton, timber, gold, diamond, bauxite, oil, coal, among others. For instance, in 1995 total primary and mineral exports from Africa accounted for 73.5% of total exports, which increased to 78.5% in 2022 (UNCTADStat, 2023).

In modern production and growth theory, energy is considered as a key input and its importance would likely increase in the ongoing digitalized revolution with huge potential of Artificial Intelligence (IA) and its role on robotics, which requires significant energy use to enable their operations in homes, industries, and in service delivery. The role of the industrial revolution and economic transformation of the developed regions of the world could not be possible without access to cheap energy resources. Figure 6.1 presents the association between GDP per capita (real) and energy use, which suggests a positive association in Sub-Saharan Africa (SSA) for the period 1990–2015. On average 2014 recorded the highest real GDP per capita (US$1700) relative to energy use of 680 kg of oil per capita while 1991 recorded the highest energy use of 698 kg of oil equivalent but real per capita income of US$1250.

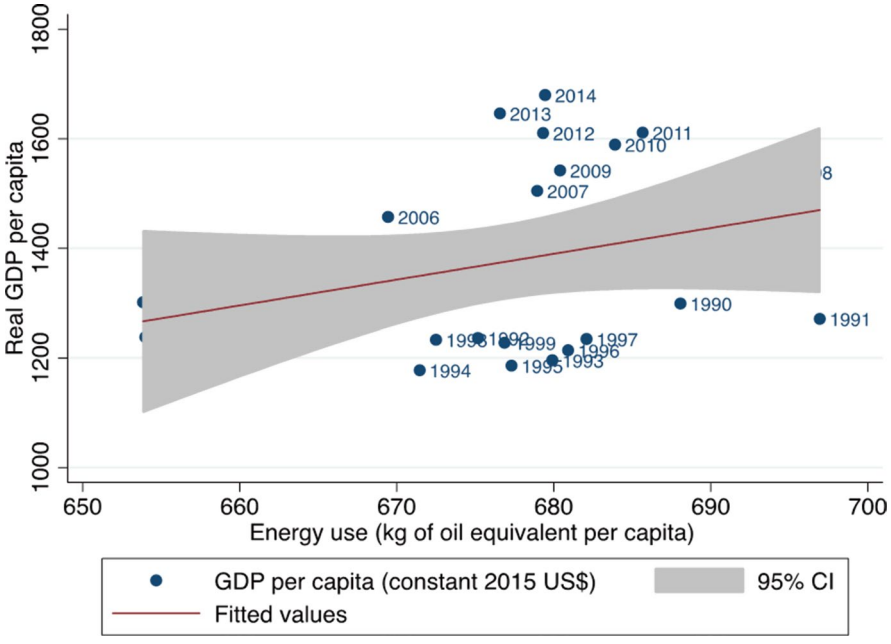


**Fig. 6.1** Relationship between real GDP per capita and energy use in SSA, 1990–2015. (Source: Authors using data from WDI [2023])

**Renewable:** Africa is endowed with energy resources, with about 7900 GW of solar potential, an unexploited hydropower potential of about 1753 GW (Hoes, 2014), wind potential of 461 GW (IRENA and AfDB, 2022), an estimated geothermal potential of 15 GW (BGR, 2016), and with a significant number of biofuel and waste energy resources. These energy resources when exploited will increase the energy usage for industrial activities which will improve trade inter alia in Africa.

**Non-renewable:** Africa's endowment of key non-renewable energy sources includes oil, coal, and natural gas. There are ongoing discoveries of oil resources across many sub-regions in Africa, particularly in West Africa, Central Africa, and East Africa. Natural gas discoveries of significant quantities are ongoing in Southern Africa such as Mozambique and in East Africa such as Tanzania, whereas coal is mostly found in Southern Africa. According to British Petroleum (2020) data indicates that Africa has a proven reserves of oil and gas with Libya leading with 48.4 billion barrels, Nigeria 36.9 billion barrels, Algeria 12.2 billion barrels, Angola 7.8 billion barrels, and South Sudan 3.5 billion barrels. In the case of gas reserves, Africa commands over 6.9% of global gas reserves, with Nigeria, Algeria, and Egypt accounting for 77% of the total proven reserves. These resources put Africa on an advantageous position in attracting foreign direct investment in both the energy sector and other important sectors of the economy so as to improve trade in Africa.

## 6.3 Structure of Energy Finance in Africa

The European Union's (EU) engagement with Sub-Saharan Africa is guided by the Cotonou partnership agreement between Member States and countries in the region, as well as by the Addis Ababa Action Agenda, the United Nations' Sustainable Development Goals (SDGs), and the Paris Agreement on Climate Change, all adopted in 2015. The promotion of universal access to affordable and sustainable energy, as enshrined in SDG 7, is a key priority in this framework. In this section we discuss the sources of finance for energy in Africa which has received a 20% decline since 2016. The issues discussed include:

### *6.3.1 Capital*

Energy investment in Africa both private and public sectors. In the period between 2016 and 2020, the private sector was responsible for more than 60% of total energy investment in the continent. Public sector entities, such as national oil companies and public utilities, play a major role in energy sector investments in Africa than in other regions. However, state-owned enterprises, particularly utilities, often face high levels of debt, requiring repeated capital injections from the state or public finance institutions (PFIs), which can limit their capacity to finance higher investments. While state enterprises will continue to play a crucial role as co-investors, private sector participation will need to grow, particularly in the power sector. Regulatory barriers to private sector

participation are expected to be lowered in the Sub-Saharan African region, with a larger role for PFIs to provide blended financing to reduce perceived risks and finance first-of-a-kind projects. By 2030, PFIs' financial flows are projected to grow to account for 10% of overall investment, helping to leverage more private finance.

Capital is a crucial component of energy finance, and Africa has been successful in attracting significant investments in recent years. According to the International Energy Agency (IEA), African energy investments reached $42 billion in 2019, representing a 3% increase from the previous year (IEA, 2020). Despite this growth, capital remains a significant challenge, with many African countries facing a substantial financing gap. To overcome this challenge, many countries are adopting innovative financing models, such as public-private partnerships (PPPs) and blended finance, to close the gap and accelerate investment in the energy sector.

### *6.3.2 Instruments*

Less than 40% of energy investment in Africa is currently funded through debt financing, as equity-based financing from international oil companies (IOCs) is more common. This trend persists in the Sub-Saharan African region due to the perceived risks associated with investing in domestic projects, but reliance on debt financing is increasing. However, concerns about the sustainability of public debt make it necessary to increase the availability of privately sourced debt, which is generally limited in Africa. Commercial banks, which prefer short- and medium-term loans and institutional investors often, lack the expertise to assess infrastructure credit risks.

Instruments refer to the various financial tools used to finance energy projects. In Africa, several instruments are available, including debt financing, equity financing, and project finance. Debt financing is the most common instrument, with many African countries relying on commercial loans, bilateral and multilateral loans, and export credit agencies (ECAs) to finance energy projects. Equity financing has also gained popularity in recent years, with many private equity firms investing in African energy projects. Project finance is a specialized financing tool that involves the creation of a special purpose vehicle (SPV) to fund a specific project (International Energy Agency, 2020).

### *6.3.3 International Financial Flows*

International financial flows are crucial to energy finance in Africa, with many African countries relying on foreign investments to fund their energy projects. China, the United States, and Europe are the largest sources of foreign investment in Africa's energy sector (African Development Bank, 2021). In recent years, there has been a growing trend toward South-South cooperation, with countries such as India, Brazil, and China increasing their investments in African energy projects. While international financial flows have mainly gone

toward oil and gas projects between 2016 and 2020, there has been a shift toward power and end-use sectors, requiring an unprecedented level of international private capital (International Energy Agency, 2023). This shift hinges on an increase in international concessional financial flows through new sources of climate-related finance and regulatory reforms that attract more private capital. Domestic capital is also expanding; almost doubling by 2026–2030 compared to 2016–2020, but like international private capital, often requires concessional finance to de-risk projects, enabling African pension plans and commercial banks to participate (IEA, 2020). This expansion of domestic financial participation remains critical in hedging against currency and inflation risk, which may remain high in the near term, and can help cultivate local capital markets. Chinese firms have played a significant role in African infrastructure investment through foreign direct investment.

### *6.3.4 Structure of Finance*

The financing structure of energy projects in Africa involves various entities, including government entities, development finance institutions, commercial banks, private equity firms, and other investors (African Development Bank, 2021). Governments provide policy support and regulatory frameworks, while development finance institutions offer funding and technical assistance. Commercial banks provide debt financing, and private equity firms offer equity financing. The primary financing for energy investments globally and in Africa currently comes from capital incorporated into a company's balance sheet or from consumer assets, with oil and gas projects and electricity grid investments being almost exclusively funded through the balance sheets of the developer (International Energy Agency, 2023).

In the Sub-Saharan African region, improved policy and regulatory frameworks can strengthen the reliability of returns on clean power assets, allowing the share of off-balance sheet or project financing to double to over 20% of energy investment by 2026–2030 (International Energy Agency, 2020). Introducing auctions and standardized power purchase agreements, such as under the GET FiT scheme in Uganda and Zambia, and allowing private participation in regulated networks in more established markets are important measures to achieve this goal. Energy service contracts, such as those used in Morocco, or aggregation of small-scale assets, including access solutions based on PayGo models, can help strengthen off-balance sheet structures for end-use sectors, but their success is highly dependent on the financial situation of individual countries (International Energy Agency, 2023).

### *6.3.5 Blended Finance*

Blended finance is a financing model that combines public and private sector funding to support energy projects. It has become increasingly popular in Africa, with many governments and development finance institutions using it

to finance energy projects. Blended finance has several advantages, including the ability to attract additional private sector investment, reduce financial risks, and promote sustainable development. By combining public and private sector financing, blended finance can attract more private sector investment than traditional financing models, thereby mobilizing additional private sector financing. It can also reduce financial risks by spreading the risk between the various stakeholders, making it easier to secure financing for projects that may have been considered too risky or financially unfeasible under traditional financing models. Additionally, blended finance can promote sustainable development by facilitating the financing of projects that align with SDGs and promote environmental sustainability, social inclusion, and economic growth.

## 6.4 Energy Trade Dynamics in Africa

Africa is a continent rich in natural resources, including oil, natural gas, and other minerals. Despite this, many African countries struggle with energy shortages, and energy trade dynamics in the region are complex. In this section, we examine the energy trade dynamics in Africa, focusing on imports and exports, and how they have been affected by the COVID-19 pandemic and the Russia invasion of Ukraine.

### *6.4.1 Energy Imports in Africa*

Many African countries rely on energy imports to meet their needs. According to the African Development Bank, African countries spent $64.5 billion on energy imports in 2018 alone. The majority of these imports came from outside the continent, with the top suppliers being the Middle East, Russia, and Europe. In particular, Russia is a major supplier of oil and natural gas to several African countries, including Algeria, Egypt, and Nigeria.

The COVID-19 pandemic has had a significant impact on energy imports in Africa. Lockdown measures and travel restrictions have disrupted supply chains and caused a drop in demand for energy. As a result, the price of oil has plummeted, with Brent crude oil prices falling to their lowest level in over 20 years in April 2020. This has been particularly challenging for African countries that rely on oil exports to fund their economies.

In addition to the pandemic, the Russia invasion of Ukraine has added another layer of complexity to energy imports in Africa. The conflict has led to tensions between Russia and Europe, which impacted the supply of gas to African countries that rely on European suppliers.

### *6.4.2 Energy Exports in Africa*

On the other hand, some African countries are significant exporters of energy resources. For example, Nigeria is the largest oil producer in Africa, and Algeria is a major exporter of natural gas. Other African countries with significant energy exports include Angola, Libya, and Egypt.

The COVID-19 pandemic has also had a significant impact on energy exports in Africa. Lockdown measures and travel restrictions have disrupted supply chains and caused a drop in demand for energy, leading to a decrease in export revenues for many African countries. In particular, the collapse of oil prices has been a significant blown to oil-exporting countries in Africa.

The Russia invasion of Ukraine has an impact on energy exports in Africa. The conflict led to tensions between Russia and Europe, which impacts the supply of gas to European countries and, in turn, impact the demand for African energy exports. However, it is worth noting that the impact of the invasion on African energy exports is likely to be limited, as the majority of African energy exports go to Asia.

## 6.5 Energy Security and International Trade in Africa

Energy security is an important element in international trade in Africa since it accounts for nations' ability to successfully meet their energy needs (Odoom et al., 2023). Energy security simply means having access to sufficient (adequate) or reliable energy resources at reasonable prices for the foreseeable future free from serious risk of major disruptions or services (Odoom et al., 2023). In recent times global events such as COVID-19 and Russia's invasion of Ukraine have sparked a serious debate on the sustainability of energy security across the globe. This has made Europe look elsewhere to support their energy needs. The Russian invasion of Ukraine in recent times has heightened the need to ensure that energy security is a priority since Russia cut-off or significantly reduced its supply of energy to Europe due to sanctions imposed by the West on Russia. The European Union under its Energy Security Union has to find alternative avenues to trade using Africa as a main destination to ensure that its citizens meet their immediate energy needs.

### *6.5.1 Potential African Energy Trade with Europe*

With Russia indefinite cut in the supply of gas to Europe, they are now looking at Africa as a new destination for gas to Europe. Gazprom, the Russian owned energy company and majority of shareholder of the Nord Stream, pipeline announced their plans to halt all deliveries of gas to Europe. The reason cited for this was for maintenance but later, the reason was changed to reflect the sanctions imposed on Russia by the West. The decision by the West to impose these collective sanctions made Russia withdrew its services further imposing some level of vulnerabilities in the energy security situation of Europe. With a long-standing Energy Partnership Agreement with the African continent which includes about 80 countries involving Africa and the European Union, the EU member countries are now turning to Africa to help provide gas for them especially during the winter when the weather turns on new era. Africa has the

potential to replace Russian gas exports to Europe by one-fifth by 2030 (IEA, 2022). However, Africa's energy growth needs are also expanding due to population growth and rapid industrialization. The estimates are that Africa's energy demand is likely to increase by 30% by the end of 2024. If this should happen, Africa needs to exploit its renewable energy sources should the continent still want to maintain the current demands by the EU and maintain the Africa-EU Energy Partnership (AEEP) bond established in 2007.

**Box 6.1 Africa-EU Energy Partnership (AEEP)**

Goal 7 of the sustainable development goals looks at access and affordable energy for all. The EU is aimed at helping Africa to achieve this important goal. This is to enable Africa to ensure access to affordable, reliable, sustainable, and modern energy for all. Africa signed a long-term Energy Partnership (AEEP) with Europe aimed at sharing knowledge, setting common political priorities and developing joint programs on key energy issues of interest to Europe and Africa. This is one of the partnerships adopted under the Joint Africa-EU Strategy (JAES), signed by 80 African and European Heads of States and Government back in 2007 at the Lisbon Summit.

The AEEP's overall objective is to improve access to secure, affordable, and sustainable energy for both continents, with a special focus on increasing investment in energy infrastructure in Africa. This includes renewable and non-renewable energy investments. Green energy options in terms of energy transition have taken the Center stage in Africa. This partnership commitment was renewed by both the EU and the African Union during the 6th EU-AU Summit in Brussels on 17th–18th February 2022. The EU announced a commitment of €150 billion to support energy-related investments in Africa to help the continent achieve its common ambition for the SDGs agenda by 2030 on affordable and clean energy for all and the African Agenda 2063. This investment package is part of the Commission's Global Gateway Strategy to support investment in sustainable infrastructure worldwide. The EU supports a number of flagship projects in Africa, including the energy sector through the Global Gateway.

## 6.6 Challenges of Energy Security and Trade in Africa

This section discusses the challenges African countries are likely to encounter in energy security and trade in the African continent. The issues discussed here include population growth, rapid industrialization, growing debt burden, climate change and governance. These issues are critical to holding the energy security situation of Africa and how this is likely to affect African trade.

### 6.6.1 *Population Growth*

Africa is a home to the world's younger population; 2021 estimates show that about 77% of the current population in Africa is below 35 years of age. Again, with the current population growth rate of 2.5%, the African population is likely to reach 1.34 billion by 2050. And of this population, two out of every five children born in the world would be of African descent. This means that this youthful population will demand more energy to use in the wake of the global digital transition that requires the use of more gadgets. Additionally, there will be a demand for access to affordable electricity, clean cooking fuel, renewable energy, and efficient energy sources. This means that Africa has to double its current effort in achieving energy security ahead of the challenges yet to be experienced. Africa does have to work very hard to utilize its proven oil and gas reserves which account for approximately 7.5% and 7.1% of global reserves, respectively (Africa Energy Outlook, 2022). Countries such as Nigeria and Libya already have a developed oil and gas industry; other countries that have discovered oil and gas in commercial quantities are equally progressing in the development of their oil and gas industry. Again, Africa has to tap from its heavy wind, sunshine, thermal and biomass, and other sources of renewable energy to develop cheaper and accessible energy sources ahead of their population growth and its demand for energy. This higher demand due to population growth will equally mean that the region might have difficulty in exporting some of its energy sources if they do not produce enough to meet its own population. As of the end of 2016, 57% of the population in Sub-Saharan Africa did not have access to electricity. This means that an increase in population growth will lead to an increase in urbanization which may have an impact on energy efficiency. Li et al. (2019) find that an increase in urbanization leads to an increase in energy consumption which has implication on energy security.

### 6.6.2 *Rapid Industrialization*

Africa's rapid population growth rate will drive industrial demand for energy sources. Energy is a key factor of production and as such higher population growth will require more industrial activities. There will be portfolio inflows into Africa for increase in the industrial sector so as to take advantage of the rapid population growth. This will increase energy demand and supply. The biggest and most populated economies in Africa, South Africa, and Nigeria are currently experiencing high levels of energy demand. However, South Africa uses its vastly developed and industrial economy to produce about 50 GWe of electricity, the highest in any African country as opposed to Nigeria with a population four times of its economic rival South Africa produces far less in terms of energy (Salakhetdinov & Agyeno, 2022). Typically, in recent times, the teaming youth in Africa has much appetite for industrial

goods such as electronics, stable consumables, etc., which is driving the industrial sector and more energy sources are need to drive this growth. Research has demonstrated acute energy crises have a detrimental impact on GDP growth. The cases of Ghana between 2013 and 2015 and that of South Africa in 2007 are classic cases of an impact of acute energy crisis on GDP growth. Again, energy insecurity may lead to lower production which means that Africa might not be in a good economic position to produce to feed her expected higher population let alone to export goods and services. Thus, the continent needs to up its game to be able to meet this essential need knowing very well that there will be an expansion in population. If this is not addressed urgently, the continent might end up worsening its terms of trade going into the future when the population expands beyond its industrial expansion to contain them.

### *6.6.3 Growing Debt Burden*

Most African countries in recent times are experiencing debt traps due to high debt burdens. This may affect African country's ability to access debt finance to finance energy-related projects. Most Sub-Saharan African countries debt-to-GDP ratios has increased due to the shift from concessionary and bilateral loans in the early 2000s to non-concessionary sources of financing such as Eurobonds and other commercial loans in recent times. Most SSA debt-to-GDP ratio has reached record high of 57% of GDP in the last two decades (African Energy Outlook, 2022). In North Africa, debt levels have risen from 12 percentage points to over 88% of GDP. These debt levels are above the IMF sustainability debt threshold of 55%. This is making debt servicing difficult for most African countries. This might impact African access to funds in the capital market for energy-related investment. For instance, Ghana has legacy debt in the energy sector and due to that as part of the 2015 IMF program, the Energy Sector Levy (ESLA) was instituted to mobilize funds to pay for debt owned by Bulk Oil Distributors, pay Independent Power Producers and others who deal in energy. Again, in recent times, African countries that depend heavily on oil revenues are likely to have a decline in their revenues in future. This is likely to have an impact on their budget and for that matter energy-related investments. It is projected that oil revenues are likely to decline by 40% between 2021 and 2030. This is so because countries around the globe are accelerating their effort to meet the zero emissions by 2050. This heavy decline in oil revenues by major oil-producing countries such as Nigeria, Algeria, Angola, and Libya will significantly affect their energy security since there will not be enough funds from oil to invest in the energy sector given the growing population of 2.5% per annum. Again, these countries' terms to trade would be affected because over 80% of their export is in the oil and gas sector. They may end up recording a negative balance of payments.

### *6.6.4 Climate Change*

Roughly about 53 countries in Africa as of May 2022 have submitted their Nationally Determined Contributions (NDCs) a climate action to mitigate greenhouse gas emissions and to adapt to climate change (Africa Energy Outlook, 2022). Out of this number, 80% are updated first or second submissions. If African NDCs are implemented they will fully mitigate around 550 million tons of carbon dioxide (Mt CO2) by 2030 compared with their own business-as-usual baseline of 40% of the continent's emissions today. The African Agenda 2063 has specifically made emphasis on renewable energy sources should provide the basis for the expansion of Africa's energy systems to ensure energy security and decarbonization. At the end of COP26, seven African countries and the East African Development Bank signed the Statement for International Public Support for the Clean Energy Transition, to end finance for fossil fuel-based power plant generation by the end of 2022. For instance, Morrocco pledged not to build any new coal-fired power plants, while Egypt committed to phase-out coal-fired power stations. South Africa had also committed to decarbonize its economy and phase down coal use. Again, the other 12 African countries have announced long-term net zero emissions pledges, aiming to reach carbon neutrality by 2050 and 2070, respectively. However, the small Island country of São Tomé and Príncipe reached climate neutrality back in 1998 using carbon sinks. Developed countries promised in the Paris Agreement in 2009 to contribute USD$100 billion annually to developing countries to finance climate change by 2020 via bilateral public finance, public financial institutions, and private finance. Fast forward to COP26, developed countries acknowledge that they could not achieve their promise and only managed to reach a total contribution of USD$79.6 billion by 2019. According to the OECD (2021) these countries re-committed to meeting their earlier pledge by 2022. However, the 2022 pledged has also been missed with developed countries not being able to make contribution to developing countries. The move to reduce carbon emissions in the planet has made most countries in the world including Africa reduce the building of power plants that will be powered with fossil fuel and coal. This may pose some challenges to energy security in African countries that are not prepared enough financially and policy-wise to transition to cleaner sources of energy. Again, it will reduce the revenues of petroleum-producing countries in Africa thereby affecting the terms of trade in African oil and gas exporting countries. Countries such as Nigeria, Libya, Angola, Equatorial Guinea, and others whose export of crude oil and gas is over 80% of their total export of this commodity will be affected.

## 6.7 Energy Demand and Balance of Payments in Africa

Energy demand in Africa has been increasing rapidly in recent years due to population growth, urbanization, and economic development. However, many African countries face significant challenges in meeting this demand due to

limited domestic energy resources and inadequate infrastructure. As a result, many countries have become heavily reliant on energy imports, which have significant impact on their balance of payments. This section examines the relationship between energy demand and the balance of payments in Africa.

### *6.7.1 Energy Demand in Africa*

Energy demand in Africa is driven by a variety of factors, including population growth, urbanization, and economic development. According to the African Development Bank, the demand for energy in Africa is expected to triple by 2040, with electricity demand alone expected to increase by 4.5% per year. This increase in demand is driven by rapid urbanization, as more Africans move to cities and require energy for transportation, housing, and commercial activities.

Despite this increase in demand, many African countries face significant challenges in meeting their energy needs. Many countries have limited domestic energy resources and inadequate infrastructure, which means they must rely on energy imports to meet their needs. This may have significant impacts on their balance of payments. Thus, higher demand implies that a significant amount of their international reserves would be spent on energy imports. This does not only have a single impact on their balance of payment but also on their exchange rate which worsens their reserves. In recent times, Ghana battled with balance of payment problems due to worsening depreciation and higher cost of refined oil imports. The country recently resulted in the use of gold for oil policy (G4O). A policy to exchange refined crude oil with gold, (derivatives) aimed at reducing the pressure on the Ghanaian cedi and solving their balance of payments problems.

### *6.7.2 Balance of Payments in Africa*

The balance of payments is a record of all the economic transactions between a country and the rest of the world. It includes trade in goods and services, as well as financial transactions such as investments and loans. A country's balance of payments can be in surplus or deficit, depending on whether it is exporting more than it is importing or vice versa.

Many African countries have a negative balance of payments, meaning they import more than they export. This can be particularly challenging when it comes to energy imports, as energy is a major component of most countries' import bills. According to the International Monetary Fund, the average energy import bill for Sub-Saharan African countries is around 20% of their GDP. The impact of energy imports on a country's balance of payments can be significant. When a country imports more than it exports, it must finance the difference through borrowing or by using its foreign reserves. This can put pressure on a country's exchange rate and lead to inflation. In addition, if a country is unable to pay for its energy imports, it may face supply disruptions, which may have significant impacts on its economy and society. Again, in 2022,

Ghana experienced significant depreciation of the cedi recording 54% as of November 2022, the highest since 2007 when the cedi was redenominated. Again, end-of-year inflation was 54.1% due to the worsening depreciation of the cedi and higher cost of energy prices. The prices of petrol and diesel increased by over 100% and electricity tariffs also increased over 50%. These and many other factors affected the resources of Ghana to the extent that Ghana could only have three (3) weeks of import cover as of the end of 2022.

### *6.7.3 Strategies for Managing Energy Demand and Balance of Payments*

Given the challenges associated with energy demand and balance of payments in Africa, many countries have implemented strategies to manage their energy needs and reduce their reliance on imports. These strategies include:

- **Developing Domestic Energy Resources:** Many African countries are exploring and developing their domestic energy resources, including oil, natural gas, and renewable energy. By developing these resources, countries can reduce their reliance on imports and improve their balance of payments.
- **Investing in Energy Infrastructure:** Many African countries have inadequate energy infrastructure, which can limit their ability to meet their energy needs. By investing in new infrastructure, such as power plants, transmission lines, and distribution networks, countries can improve their energy security and reduce the need for imports.
- **Promoting Energy Efficiency:** Many African countries have significant opportunities to improve energy efficiency in their economies. By promoting energy-efficient technologies and practices, countries can reduce the amount of energy they need to import and improve their balance of payments.
- **Managing energy resource revenues:** Some African countries such as Nigeria, Libya, Angola, Algeria, and others are major oil and gas exporting countries. They need to invest their revenues into energy transition so that they can have diversified energy sources and through this, they could reduce their energy demand in the future which could help to improve their balance of payment position especially since the African population is expected to grow.

## 6.8 Energy War and Trade in Africa

The African continent is witnessing significant developments in energy production, trade, and its strategic role in the global economy. Africa has significant deposits of oil, gas, and renewable resources, making it a focus for global energy interests, leading to increased competition for access to and control

over its valuable resources. In addition to the interaction of energy demand and balance of payments, geopolitical considerations, climate change, and conflicts all have an impact on Africa's energy environment. These variables have a considerable impact on the dynamics of the energy supply and have a wide-ranging impact on the energy security and economic growth of the region.

The strategic importance of Africa as a producer and exporter of energy has spurred fierce geopolitical competition among major global powers. Foreign countries and international corporations are competing for control over resources and influence, which has resulted in intricate diplomatic alliances and power battles throughout the continent (Achem & Anikelechi, 2021; Ani, 2021). While some countries see Africa as a chance to diversify their energy sources, others are looking to increase their geopolitical influence there (Li et al., 2021). This competition has an impact on wider political dynamics and security arrangements in addition to Africa's energy strategy. For instance, the involvement of external actors in energy projects may have both positive and negative effects on development, including the possibility of political interference and resource exploitation. Africa's energy landscape is evolving rapidly, driven by the continent's increasing demand for power, expanding population, and growing industrialization (Leke et al., 2022). However, the pursuit of energy security and economic development in Africa must also confront the pressing challenge of climate change.

### *6.8.1 War-Prone Areas and Energy Trade*

The availability and delivery of energy are severely hampered by armed conflicts and wars in some parts of Africa. Power plants, transmission lines, and fuel pipelines are examples of critical energy infrastructure that frequently become the target of attacks in these conflict-affected areas, resulting in considerable damage or destruction (An et al., 2020; Månsson, 2014). As a result, energy supplies to both urban and rural people are severely disturbed, resulting in protracted power outages and impeding the provision of important services like healthcare and education that depend on a reliable energy supply. The deliberate targeting of energy infrastructure during conflicts can have catastrophic effects on the local economies (Crawford & Botchwey, 2017). Industries might be compelled to stop operating, which would result in job losses and lower economic production. Businesses that depend on a steady energy supply may find it difficult to operate, which could have a negative effect on livelihoods and impede overall economic activities and trade.

Additionally, the instability and unpredictability that characterize war-prone areas discourage both domestic and foreign investment in energy initiatives. Investors are reluctant to participate in the development of energy infrastructure due to the impression of increased risk, leaving the area to struggle with underdeveloped energy resources (Zakeri et al., 2022). In turn, this causes persistent energy deficits and reduces the likelihood of an economic rebound. Energy distribution and production become more unstable in nations that are

constantly at war. Security risks to energy personnel and transport routes often lead to reduced energy production and constrained supply. Also, disruptions in cross-border energy trade, which is essential to enhancing energy security in many African countries, might exacerbate energy shortages in neighboring economies that rely on imports from conflict-affected areas.

Addressing these challenges necessitates resolving conflicts and fostering peace and stability in war-prone areas. Peaceful resolution and post-conflict reconstruction efforts must prioritize the rebuilding of damaged energy infrastructure to re-establish reliable energy supplies. Attracting investments in the energy sector requires providing a conducive and secure environment, assuring potential investors of the region's stability and commitment to safeguarding energy infrastructure. Furthermore, regional cooperation in energy matters can significantly mitigate the impact of conflicts on energy supply. Collaborative energy projects and interconnections between countries can serve as alternative routes for energy transmission, ensuring a more reliable and resilient energy supply even during conflicts in specific regions. Energy trade and sharing resources can create a safety net against disruptions and help balance energy demand and supply across borders.

## 6.9 Concluding Remarks

Although Africa has witnessed significant economic growth, meeting its energy needs remains a challenge, with a large number of people lacking access to reliable and affordable energy sources. The promotion of universal access to affordable and sustainable energy, as enshrined in SDG 7, is a key priority in this framework and the African Agenda 2063 which aimed at providing cleaner sources of energy is of importance to meeting the energy security of Africa and fostering bilateral and multilateral trade in Africa and the rest of the world. In recent times the European Union's engagement with Sub-Saharan Africa has been guided by various agreements and goals, including the Cotonou partnership agreement, the Addis Ababa Action Agenda, the UN's SDGs, and the Paris Agreement on Climate Change. These agreements are guided by significant investments in the energy sector necessitating the development of an effective energy finance structure.

Africa has enormous energy potential which includes both renewable and non-renewable energy sources. There is a significant oil deposit in Africa commanding close to 7% of the global reserves, there is an abundance coal, thermal, sunshine, wind waves, and biomass in Africa. All these resources are there to support the energy security and transition process in Africa. Yet Africa is a home of only 57% of electricity access making it difficult for her people to meet the needed energy security needs. Several factors account for the enormous challenges Africa is facing, including climate change, urbanization due to rapid population, industrialization, wars among others. These challenges must be tackled head-on to redeem the African continent from any future energy insecurity.

Similarly, African energy trade dynamics are complex and have been significantly impacted by the COVID-19 pandemic and the Russian invasion of Ukraine. While African countries rely heavily on energy imports, the pandemic has disrupted supply chains and caused a drop in demand for energy, leading to a decrease in import revenues. On the other hand, some African countries are significant exporters of energy resources, but the collapse of oil prices and the impact of the Russian invasion of Ukraine on European demand for energy exports have led to a decrease in export revenues. Overall, the energy trade dynamics in Africa are likely to remain volatile in the face of these ongoing challenges. Again, many countries in Africa are becoming increasingly over-reliant on energy imports such as refined crude oil which substantially covers over 20% of their GDP and this is affecting their balance of payments. There is a need for investment in the energy infrastructure such as refineries and gas pipeline distributions, electricity power generation, and grid distribution lines, etc. This will help to increase energy efficiency and help to protect the balance of payments of African countries that rely on energy imports.

In conclusion, armed conflicts and wars in Africa pose severe challenges to the continent's energy supply and distribution. The deliberate targeting of energy infrastructure, alongside security risks and disruption of energy trade, hinders the development of energy resources and results in prolonged energy deficits. Resolving conflicts, rebuilding energy infrastructure, and promoting regional cooperation are essential steps toward revitalizing energy sectors in war-prone areas. By fostering peace and stability and embracing collaborative energy strategies, Africa can strengthen its energy resilience, support economic recovery, and ensure a more sustainable and secure energy future for its people.

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PART III

# Trade Finance and Payment Systems

CHAPTER 7

# An African Exchange Rate Mechanism in the Era of an African Continental Free Trade Area

*Eman Moustafa and Amira El-Shal*

## 7.1 Introduction and Rationale

Africa has exhibited remarkable economic performance, surpassing global growth rates over the past two decades. However, despite this sustained rapid growth, the continent faces challenges in establishing a sustainable path toward development and integration. Africa's real GDP has grown at an average rate of 8.6% over the past 20 years, outpacing the world economy's average growth rate of 2.7%. Nevertheless, Africa remains exposed to various risks. Internally, armed conflicts and political instability persist in several regions, impeding progress and development. Externally, the continent's reliance on imports and dependence on commodities make it susceptible to global volatility. Consequently, Africa's growth performance masks significant disparities among economies and falls short of the level required to achieve the structural transformation witnessed in countries like China and other emerging economies.

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_7

Given that Africa is currently one of the least integrated regions globally, economic integration stands as the primary policy lever to foster and sustain its growth. Africa's share of global imports and exports has consistently hovered around 3%, with an even lower rate in the services sector. The continent's geographic, economic, and political fragmentation creates significant trade and investment barriers, hindering its potential for regional and global value chain integration. This fragmentation leads to increased costs, making Africa one of the costliest regions for both global and intra-regional trade. Intra-regional trade in Africa has remained low compared to other regions, with a modest increase from around 10% to 16% in the past decade. In comparison, the Association of Southeast Asian Nations boasts a 30% intra-regional trade rate, while the European Union achieves an impressive 60% intra-regional trade rate.

A significant obstacle to intra-regional trade in Africa is the presence of 41 different currencies across the region. Many of these currencies suffer from limited liquidity in the global financial market and exhibit high volatility, creating challenges for investors and traders seeking to engage in business activities in Africa. Whether it is the Namibian dollar or the Seychellois rupee, it is crucial for organizations to access emerging market currencies reliably, in a timely manner, and at competitive prices. Unfortunately, traders dealing with Africa often struggle with currency-related issues, which further hampers intra-African trade and impedes the development of Africa as an emerging opportunity for international investors and traders seeking high-growth prospects.

What could be the solution? Taking inspiration from the success of the European Union (EU) and how the monetary union contributed to prosperity and development in the region, the African Union (AU) has pursued the establishment of an African Monetary Union since the Abuja Treaty in 1991. The potential of an African monetary union holds the promise of significant economic benefits, such as economies of scale, reduced transaction costs, and a more favorable business environment in Africa. Another long-standing proposal is the adoption of a single African currency. This idea was initially raised in 1963 with the establishment of the Organization of African Unity and has remained a topic of discussion in African integration efforts, with the South African President expressing support for a unified currency in 2018, emphasizing its potential to enhance trade and attract foreign investment.

A unified monetary union holds the potential to contribute significantly to Africa's regional integration aspirations. At the core of such a union is the adoption of a common currency, which can yield various benefits such as reduced transaction costs, economies of scale, and mitigation of exchange rate risks. This is crucial for minimizing risk perception, promoting trade, and driving overall growth across Africa. The success of the Euro in Europe exemplifies the power of an integrated monetary structure in facilitating efficient business transactions, expanding human and institutional capacities, and propelling economic progress. In today's knowledge-based economic structures and information societies, characterized by interconnected networks of individuals, firms, and nations, the adoption of a single African currency becomes

increasingly inevitable. If realized, it would reshape Africa's social, political, and economic landscape and position the continent on a solid foundation to address significant challenges and risks. Currently, former colonizers in Europe still maintain greater trade partnerships with many African nations compared to immediate neighbors within Africa. Therefore, currency unification could serve as a vital catalyst to bolster intra-African trade, ultimately transforming the continent, particularly with the implementation of the AfCFTA agreement.

Although the establishment of a single African currency has been an official objective, it has not received formal study or analysis by the AU or other official African institutions. Instead, it is often considered a symbolic goal by African politicians and central bank governors, with limited concrete action taken to pursue it. At the grassroots level, the response from the African people remains relatively subdued, lacking a significant groundswell of public support (similar to the early stages of the EU). However, the successful launch of the Euro generates some expectations regarding the potential success of a similar African currency.

The key challenge now is how Africa can proceed with this unified monetary union considering the lopsided economic structures among its economies, the matter that affects economic crises management strategies. Africa's 55 states are diverse and at very different stages of economic development. A monetary union and a single currency would require converging differing macroeconomic objectives of inflation and interest rates. Not only would Africa struggle to achieve this in the current economic circumstances, but it would also likely create a myriad of new, unpredictable issues. Countries would lack the ability to respond individually to asymmetric shocks, for example. And the alternative—a unilateral monetary policy—may not serve the economic needs of all equally. Given the structural and implementation concerns, the achievement of a single currency appears unlikely in the short to medium term (Khan, 2013).

Considering this, and for the dream of an integrated Africa to manifest, the continent needs to enact a prerequisite step which is the adoption of a unified African Exchange Rate Mechanism (AERM). The adoption of an AERM would allow for a smooth transition among the African countries into a single currency and the long-sought monetary union. Following the example of the EU, an exchange rate mechanism will reduce exchange rate volatility and achieve monetary stability among participating members. The mechanism operated for years leading eventually to the convergence of European macroeconomic indicators that set the monetary union in place.

In addition, an AERM is a key enabler for growth of the African Continental Free Trade Area (AfCFTA). A unified exchange rate mechanism can efficiently manage the exchange rate differences in the member countries which will ultimately reduce transaction costs for cross-border trade and investment. A successful implementation of the AfCFTA is going to be a long and uphill path. In addition to political turmoil, infrastructure gaps, and conflicts, different exchange rate regimes entailing heterogeneous reactions to price, fiscal,

productivity, and debt shocks result in significant misalignments and substantial growth disparities among African nations.

Taking everything into consideration, in this chapter, we provide our thoughts on the relevance of AERM for countries with different governance structures and membership in trade agreements. We will tackle the most prominent challenge of how Africa could develop a plan to initiate a continental ERM given the structural differences between its economies and the relatively low intra-trade rate.

To date, insufficient research is available on the feasibility and desirability of an AERM. Therefore, the end goal of this note is to assess the need for such a mechanism and its potential economic benefits and challenges. To answer this question, we consider the benefits and costs of an exchange rate mechanism in an African context. Following this introductory section, Sect. 7.2 clarifies on the objectives of the AERM; Sect. 7.3 lays a background and context; Sects. 7.4 and 7.5 discuss benefits and costs of an AERM; Sect. 7.6 discusses the European model as an example; Sect. 7.7 presents the main issues related to an AERM; and Sect. 7.8 concludes.

## 7.2 The Objectives of the AERM

The exchange rate mechanism (ERM) is a tool that governments can use to influence the relative price of their currencies in forex market. It is a part of an economy's monetary policy and is used by central banks to tweak a currency peg to normalize trade and/or influence inflation. There are four main types of exchange rate regimes: freely floating, fixed, pegged (also known as adjustable peg, crawling peg, basket peg, or target zone or bands), and managed float.

An ERM is not a new concept. Throughout history, many new currencies have emerged with a foundation in fixed exchange mechanisms, often pegged to gold or other widely traded commodities. These currencies were designed with a loose adherence to fixed exchange rate margins, enabling exchange rates to fluctuate within certain defined boundaries. This approach strikes a balance, allowing a currency to experience some variability without compromising liquidity or exposing the economy to additional risks.

To date, the EU has been the most vivid example of the implementation of an ERM. It was established with the aim of reducing exchange rate fluctuations and attaining monetary stability in Europe prior to the introduction of the Euro in 1999. The ERM served to normalize exchange rates among participating countries, ensuring a smoother transition and preventing potential market uncertainties. Although the original European ERM was dissolved, the European ERM II was subsequently adopted to facilitate the integration of new members into the Euro Zone. This second phase involved countries such as Estonia, Lithuania, Slovenia, Cyprus, Latvia, Slovakia, and others. An African ERM (hence after, AERM) can impact the economy positively more than the current multiple exchange rate regimes, which creates opportunities for arbitrage and can trigger hyperinflation. An AERM will help to reduce the

uncertainty that came with fluctuations while potentially limiting inflationary pressures. This may help to improve growth rates and liberate monetary policy to focus on domestic economies.

An AERM is a key enabler for growth of the African Continental Free Trade Area (AfCFTA). The implementation of a unified exchange rate mechanism will effectively address exchange rate disparities among member countries, leading to a reduction in transaction costs for cross-border businesses. This unification is especially crucial due to the diverse range of exchange rate regimes across sub-regional markets. These variations result in heterogeneous responses to factors such as price changes, fiscal policies, productivity shifts, and debt shocks, leading to considerable misalignments and significant growth disparities among nations.

## 7.3 Background and Context

The establishment of a monetary union and a single African currency has been a long-standing objective for African unity since the 1960s. While the idea of a single African currency had been discussed for many years, it gained renewed prominence in 2001 when the African Union (AU) took on a broader mandate to address the challenges posed by globalization while upholding the commitment to economic integration inherited from its predecessor. The Abuja Treaty, signed in 1991 and effective from 1994, laid out a roadmap toward the completion of an African Economic Community by 2028. This roadmap consisted of six stages, with the initial stages focusing on strengthening intra-regional integration and fostering harmonization among the Regional Economic Communities (RECs) as depicted in Fig. 7.1.

The first stage has been successfully accomplished, while the second stage, originally intended to be finalized by 2007, remains incomplete due to uneven progress among the regional blocs. The subsequent stages of the roadmap include the establishment of free trade areas, a continental customs union, an African common market, an African economic monetary union, and the formation of a parliament. Figure 7.2 provides a timeline indicating the remaining years for each of these six stages.

It is important to note that while progress has been made, there are ongoing challenges and variations in the advancement of regional blocs toward the objectives outlined in the Abuja Treaty.

The realization of the African Economic Community, as envisioned in the Abuja Treaty, relies on the collaboration of eight Regional Economic Communities (RECs) as depicted in Fig. 7.1. These RECs are geographically classified as follows: the Arab Maghreb Union (AMU/UMA) in North Africa, the Economic Community of West African States (ECOWAS), the East African Community (EAC) and the Intergovernmental Authority on Development (IGAD), the Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA) in Southeast Africa, the Economic Community of Central African States (ECCAS), and the

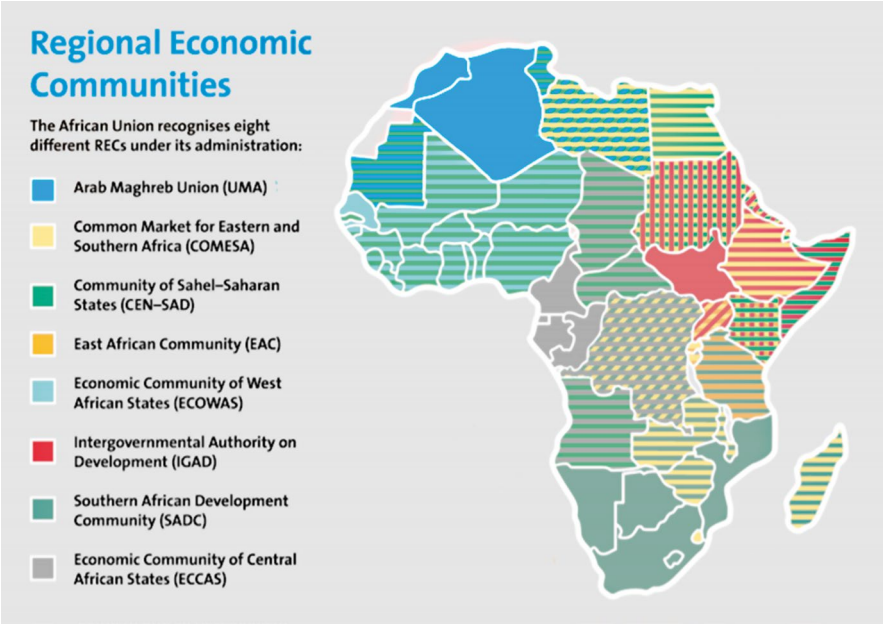
Regional Economic Communities
The African Union recognises eight different RECs under its administration:
Arab Maghreb Union (UMA)
Common Market for Eastern and Southern Africa (COMESA)
Community of Sahel–Saharan States (CEN–SAD)
East African Community (EAC)
Economic Community of West African States (ECOWAS)
Intergovernmental Authority on Development (IGAD)
Southern African Development Community (SADC)
Economic Community of Central African States (ECCAS)

**Fig. 7.1** Regional Economic Communities in Africa. (Source: Regional Economic Communities–PACCI, 2023)

**Fig. 7.2** Timeline of the establishment of the African Economic Community 2028

Community of Sahel-Saharan States (CENSAD) (refer to Fig. 7.1 for visual representation). These RECs serve as integral components for achieving the objectives outlined in the Abuja Treaty.

Alongside the ongoing efforts to integrate the Regional Economic Communities (RECs), the African Union (AU) has introduced numerous programs and initiatives to reinforce integration. However, the AU's strategy for regional economic integration hinges on the establishment of regional monetary unions within the RECs. The ultimate objective of attaining a unified African currency relies on utilizing these RECs as foundational building blocks, with regional currencies gradually merging into a single currency for the entire continent. Considering the far-reaching economic and political implications of such a plan, it is essential to subject it to meticulous examination and continuous reassessment of its feasibility and desirability. A comprehensive evaluation is vital to ensure that any decisions regarding a full African monetary union are made with careful consideration.

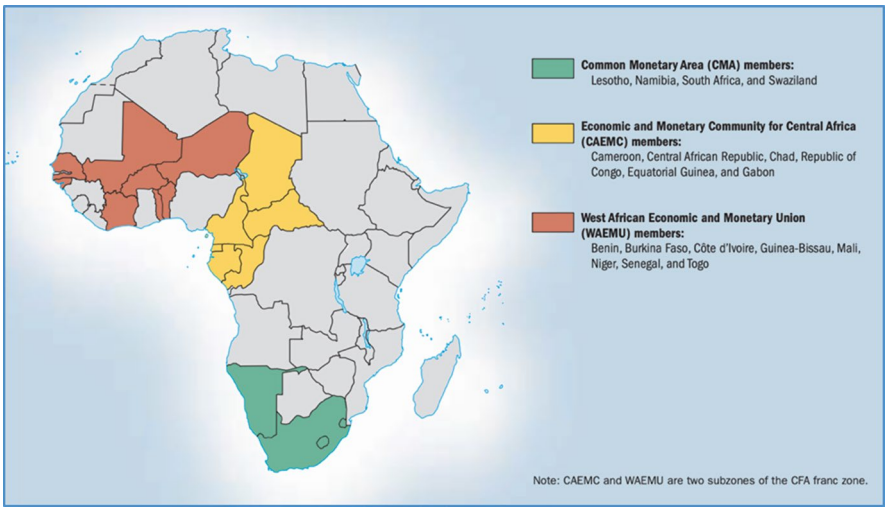
Common Monetary Area (CMA) members:
Lesotho, Namibia, South Africa, and Swaziland
Economic and Monetary Community for Central Africa (CAEMC) members:
Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon
West African Economic and Monetary Union (WAEMU) members:
Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo
Note: CAEMC and WAEMU are two subzones of the CFA franc zone.

**Fig. 7.3** Regional Monetary Unions in Africa. (Source: Regional Economic Communities—PACCI, 2023)

The expansion of existing Regional Economic Communities (RECs) as illustrated in Fig. 7.1 has been utilized as a strategy to incentivize countries to enhance their policies, as depicted in Fig. 7.3. However, this progress remains far from the ambitious goal of realizing the ultimate African Monetary Union. Notably, advancements toward a monetary union have been primarily observed in regions that possess a historical precedent of single currencies established during the colonial era, such as the West African Economic and Monetary Union (WAEMU), ECCAS, and EAC. It is important to note that the East African Community (EAC) currently lacks a single currency. Although countries formerly under British rule (Kenya, Uganda, Tanganyika, and Zanzibar) previously employed the East African shilling, they diverged after attaining independence.

The vision of establishing an exchange rate mechanism, followed by a unified monetary union, and ultimately adopting a single currency holds the potential to create a unified market in Africa, characterized by the free movement of goods, people, services, and capital without internal barriers. However, it is crucial to approach the implementation of a single currency with great care, as haphazard execution can lead to severe repercussions for Africa's global reputation, individual national economies, and, most importantly, the well-being of African people.

Significant challenges persist in achieving economic and monetary integrations due to limited institutional capacities within most Regional Economic Communities (RECs). With the exception of the franc zone, many central banks still aspire for complete independence. However, the establishment of a common central bank would entail relinquishing full autonomy over monetary

policies, which includes the flexibility to adjust exchange rates to address inflationary pressures arising from both internal and external factors. This transition would also require the African potential central bank to coordinate fiscal policies among member states and assume direct influence over matters of political sovereignty, as well as control over taxation and public spending. The available data indicates that both the RECs and the nations within them are not currently prepared for such centralized control.

## 7.4 The Benefits of an AERM and a Single Currency

Drawing from the research conducted by Frankel and Rose, it has been established that the adoption of a common currency significantly amplifies trade by threefold among member countries, compared to situations where different currencies are utilized. The presence of a monetary union and a unified exchange rate mechanism (ERM) within a region serves to effectively foster trade promotion and bolster economic growth. In Africa, substantial benefits can be attained through the implementation of appropriate measures to establish an African Exchange Rate Mechanism (AERM) and a single currency. The potential advantages can be summarized as follows:

- The pursuit of a more comprehensive regional integration in Africa holds the potential to strengthen the continent's capacity to secure advantageous trade terms. This applies not only to bilateral agreements with entities like the US and EU but also within the global framework provided by organizations such as the World Trade Organization. By embracing integration, African producers, traders, and consumers can tap into broader opportunities within an interconnected global landscape that increasingly favors larger trade blocs. This, in turn, empowers them to effectively vie for foreign investment and actively engage in international trade.
- A unified African market under a single currency has the potential to stimulate increased foreign direct investments (FDI) in Africa. Historically, many African economies have struggled to attract substantial FDI due to their limited market size. In cases where FDI has been present, it has primarily been focused on sectors such as mineral mining and petroleum. However, a single African market could unlock new FDI opportunities in emerging sectors like semiconductors, nanotechnology, robotics, and others. With increased FDI, industrialization efforts across Africa are likely to receive a boost. Transnational corporations would be more inclined to explore business prospects in a larger, homogenous African market, which offers advantages in terms of economies of scale and production efficiency. This would contribute to the expansion of industries and the development of a more diversified and robust African economy.
- The adoption of a unified currency in Africa would bring several benefits to the participating countries. By pooling resources and operating under a single currency, African nations can leverage economies of scale and

gain improved market access on more favorable terms. This, in turn, has the potential to enhance regional productivity through increased competition. Additionally, a unified currency can foster diversification in production and exports, reducing overreliance on specific industries or markets. Overall, the implementation of a unified currency holds the promise of strengthening economic cooperation, promoting efficiency, and driving sustainable growth in the African continent.

- An African Exchange Rate Mechanism (AERM) offers a viable and potentially less politically sensitive solution to the issue of multiple currencies, which continues to pose challenges to African payments and settlements. Currently, cross-border payments within Africa often involve a third currency, such as the US dollar or the Euro. Sub-Saharan Africa, in particular, heavily relies on the US dollar, with the median dominant currency pricing approaching 100% as of 2020. This overreliance on external currencies results in high costs for intra-African payments, amounting to over US$5 billion annually. In addition to the high costs, the processing of intra-African transactions is often time-consuming. The widely used SWIFT system, for instance, takes about 2 to 14 days to process a transaction. Such lengthy processing periods hinder the efficiency of intra-African trade and contribute to lower transaction volumes.
- Within the prospective monetary union, the implementation of coordinated budgetary rules would serve the purpose of reducing excessive budget deficits among member countries. Such rules are essential as unchecked budget deficits can undermine the stability of the continent's exchange rates. By enforcing prudent fiscal policies and limiting deficits, the potential monetary union can safeguard exchange rate stability, which is crucial for fostering economic growth, trade, and overall monetary integration. Coordinated budgetary rules would provide a framework to promote fiscal discipline and ensure the long-term stability and resilience of the monetary union.
- Adopting a single currency in Africa would yield several benefits, including lower transaction costs and a more stable exchange rate. By eliminating the need for currency conversions, particularly those pegged to the US dollar, African countries would experience improved financial efficiency, reduced transaction times, cost savings, and enhanced transparency in pricing goods and services. The simplified business decision-making process, free from the constraints of currency conversion and exchange rate volatility, would promote intra-community trade. Additionally, the elimination of exchange risks would stimulate cross-border trade and investments, facilitated by efficient payment and clearing systems in the banking sectors.
- However, it is important to acknowledge that there are costs associated with the loss of national autonomy over macroeconomic policies. Member states would need to relinquish certain adjustment instruments for balance of payments, as the option of individual currency devaluation or

revaluation would no longer be available. Instead, a supranational central bank would oversee significant aspects of fiscal and monetary policies, such as interest and exchange rates. These considerations highlight the trade-offs between the benefits of a unified currency and the need to navigate shared decision-making processes and coordinated policy management within the monetary union.

- The adoption of a single currency in Africa could provide African nations with the opportunity to employ more productive and effective economic strategies in managing chronic budget deficits, thereby curbing inflation. With a unified currency, the practice of printing money to address deficits would be significantly diminished among member nations. Additionally, a unified currency would enhance fiscal and monetary cooperation among member states, leading to long-term macroeconomic stability.
- The establishment of a common monetary union and a central bank would offer more reliable mechanisms for fiscal control and anti-inflationary measures. This increased cooperation and coordination within the monetary union would enable more efficient and effective implementation of policies to maintain price stability and control inflation. By aligning fiscal and monetary policies, member states can benefit from improved economic stability and enhanced macroeconomic management.
- Furthermore, a single currency would foster greater financial integration and facilitate cross-border transactions, promoting economic efficiency and supporting sustainable economic growth across the continent.

A single currency has the potential to act as a catalyst for peer competition and cooperative reforms among nations, leading to overall improvement. This improvement can be achieved through the implementation of fiscal prudence, resulting in enhanced macroeconomic stability. Consequently, member states would enhance their credibility on the international stage. By effectively allocating resources through collaborative efforts, implementing economic policies that foster growth and job creation, promoting business competitiveness, and ensuring pricing transparency across regions, Africa can establish itself as the next global outsourcing hub. This is facilitated by the continent's abundant raw materials and cost-effective labor. The presence of good job opportunities and increased trade volume within member states will contribute to improved consumer welfare and foster stronger political and mutual security ties.

## 7.5 The Costs of an AERM and a Single Currency

In the political debate, the antagonists of unification see that the above advantages of a single currency and a unified monetary union do not outweigh the loss of national sovereignty. This loss stems from the fact that joining a monetary union relinquishes the ability to independently pursue national monetary policies or adjust the exchange rate of its currency in relation to foreign

currencies. By using exchange rate adjustments or other monetary policy tools, countries can address economic disparities with other nations. For example, if one country experiences a shift in demand for its products that does not affect its trading partner, or affects it in an opposing manner, both countries face an adjustment challenge. One country may witness increased unemployment and a deteriorating current account, while the other experiences employment growth and an improved current account. Wage and price flexibility, along with labor mobility, could potentially restore equilibrium in both countries.

Alternatively, fiscal policy can also be utilized to achieve this objective. By increasing taxes in the country experiencing increased demand and transferring the proceeds to the country facing an economic downturn, equilibrium can be restored between the two nations. With flexible or adjustable exchange rates, the price mechanism in foreign exchange markets can absorb the asymmetric shocks to demand in both economies. In summary, if wages and prices are sufficiently flexible, labor mobility is feasible, and fiscal redistribution can be implemented, there may be no need for exchange rate adjustments to restore equilibrium after an asymmetric shock, satisfying the conditions for an optimum currency area. As a corollary of this theory, one could argue that when the likelihood of asymmetric shocks occurring is very low (such as when the economic structures of the countries are similar), labor market rigidities may not hinder the formation of an optimum currency area. Lastly, the introduction of a common currency would eliminate asymmetric country-specific shocks resulting from national monetary policies altogether (Khan, 2013).

When evaluating the situation in Africa, it is crucial to consider two significant factors that impact monetary policy. Firstly, it can be argued that many African countries have not effectively utilized their monetary independence, thereby suggesting that surrendering it may not have substantial costs, particularly if the new currency offers greater stability than the previous one. Secondly, the variations in fiscal discipline among countries pose a more significant source of asymmetry compared to Europe. This is due to the increased difficulty in establishing institutions that insulate the central bank from fiscal pressures in Africa.

## 7.6 The European Monetary Union (EMU) as a Model for Convergence in Africa

According to the EMU model, monetary integration is achieved through the implementation of several key elements: the introduction of a single currency, the establishment of common policies managed by shared institutions, and a significant level of convergence among participating nations as a prerequisite. In the context of EMU, convergence refers to a high level of similarity between economies in terms of their principal characteristics. Integration within the model relies on meeting criteria related to nominal and legal convergence, as well as the voluntary participation of countries. The variables used to assess the degree of economic similarity among participating nations include:

### *7.6.1 Nominal Convergence*

These variables effectively reflect the degree of homogeneity among economies, although meeting the established thresholds does not necessarily indicate true convergence, which is evident in figures such as unemployment rates, per capita income, and government expenditure. The variables used to assess this homogeneity include:

- Inflation
- Interest rates
- Public deficit
- Public debt
- Exchange rates

### *7.6.2 Legal Convergence*

The process of convergence involves aligning the national legislations and by-laws of the member countries of the EU with the requirements of the European System of Central Banks (ESCB). This convergence encompasses various aspects, including ensuring the independence of national central banks and integrating these banks into the ESCB. It entails adjusting the legal frameworks and institutional structures to establish compatibility and harmonization among the central banks of the member countries.

### *7.6.3 Real Convergence*

One of the goals of the European Union is to promote economic and social cohesion by equalizing standards of living among member countries. However, achieving this equalization requires more time than simply meeting the minimum variables, as their fulfillment has a positive impact on real variables. With the establishment of the Euro and the implementation of a common monetary policy in the EU, the following variables should be considered in assessing the evening out of revenue among member states:

- The unemployment rates
- The structure of the BOP
- The per capita revenue
- Government expenditure

### *7.6.4 Phases of Integration*

Monetary integration in the EMU took place through three crucial phases:

- Diagnostic Stage (1990–1993): During this phase, economic and monetary convergence among member states was assessed. Countries were

required to adopt appropriate measures to comply with specific provisions outlined in the Treaty on the European Union, which was signed in 1991.
- Convergence Stage (1994–1998): In this stage, member states focused on preparing for the adoption of the Euro. Significant progress toward achieving economic convergence was expected from participating countries during this period.
- Implementation Period (1999–2002): The implementation phase marked the final steps toward monetary integration. Exchange rates between the Euro and national currency units were irrevocably fixed, and the Euro officially became the currency used by participating countries, both domestically and in foreign exchange markets.

### *7.6.5 Compatibility of Convergence*

The compatibility of convergence within the EU has been the subject of empirical studies, and the post-Euro results indicate the following findings:

- Openness: Openness has shown a negative impact on productivity growth but a positive effect on prices and resurgence in the Euro area.
- Real Convergence: The process of nominal and real convergence can be compatible if economic growth is accelerated through the closing of technological gaps.
- Macroeconomic Policy Institutions: The growth and convergence of prosperity within a currency union depend on the presence of appropriate macroeconomic policy institutions.
- New Member States: New member states are required to demonstrate a high level of real and nominal convergence before adopting a common currency. However, tensions may arise between real convergence, low inflation, and a stable nominal exchange rate due to the Balassa-Samuelson Effect. This effect refers to the long-term steady-state effects and the intertemporal relative price and allocation effects in response to productivity shocks.
- Optimum Currency Theory: According to the optimum currency theory, the cost or the need for independent monetary policy control is higher when member countries are exposed to different shocks and lower when they face similar or identical shocks.

Additionally, it is important for policymakers to consider optimal macroeconomic adjustments, as wealth effects, changes in demand behavior, and potential shifts in demand can occur before the full impact of productivity changes is felt by the economy. These demand effects extend beyond the scope of the standard Balassa-Samuelson paradigm.

### *7.6.6 The EU Lessons Learnt*

The history of the Euro Zone offers valuable lessons for regions aspiring to establish a monetary union. In this context, it is pertinent to compare certain fundamental economic, geographical, and political characteristics of the European Economic Community (EEC) and Africa, while also examining their notable accomplishments. However, it becomes evident that such a comparison does not advocate for an immediate monetary integration in Africa. Additionally, it becomes apparent that the political dimensions of economic integration should be taken into account. These aspects have played a vital role in the successful establishment of the Economic and Monetary Union (EMU). Economic convergence alone is not the sole criterion that should be considered when evaluating the feasibility and desirability of monetary integration (Senadza & Bernardin, 2017).

*Comparison of Economic and Geographical Features*

Both Africa and the Economic and Monetary Union (EMU) encompass a significant number of potential consumers, with Africa boasting 1.3 billion people and the Euro Zone comprising 447.7 million individuals. These populations exhibit diverse tastes and varying standards of living, which can facilitate economies of scale in production. Both regions also demonstrate a substantial degree of specialization. In Africa, there is a focus on raw materials and low value-added commodities, whereas the EMU specializes in financial services, high value-added agricultural products, and industrial goods. This specialization and division of labor contributes to enhanced exchange and overall production efficiency.

However, a challenge faced by African countries is the relatively low level of intra-sectorial trade among its members, as well as other obstacles related to infrastructure and logistics. In contrast, intensive intra-sectorial trade is a well-established characteristic of EU countries. Overcoming these barriers and fostering increased trade within Africa would be crucial for unlocking its full economic potential.

However, there are numerous differences between Africa and the Economic and Monetary Union (EMU) that need to be taken into account. Firstly, there exists a significant asymmetry within Africa due to the dominant position of the top five largest economies (South Africa, Egypt, Nigeria, Algeria, and Morocco). Together, these economies account for approximately 55% of total African reserves and 63% of combined African GDP over the past decade. This asymmetry is much greater in proportion compared to the largest economy in the EMU, Germany, which represents only 30% of the EMU's total GDP. This creates an imbalance between these countries and the other members of the union.

Secondly, there is a similar asymmetry in terms of GDP per capita. The highest average GDP per capita in Africa over the past 10 years (Equatorial Guinea) is almost 80 times higher than the lowest (Burundi). In contrast, the highest

GDP per capita in the EMU (Luxembourg) is only three times higher than the lowest (Greece). Additionally, the average GDP per capita in Africa is 12 times smaller than the average GDP per capita in the EMU.

Thirdly, Africa's exports primarily consist of low value-added commodities and raw materials, which is a less rewarding specialization pattern compared to the higher value-added goods of the EMU. This could pose challenges in building an effective common budgetary policy.

Lastly, only 13% of Africa's trade is conducted among its member countries, while approximately 60% of the EMU's trade occurs within the union. This indicates that the transaction cost benefits of a single currency would be relatively small for Africa compared to the EMU. These factors highlight the complexities and disparities that would need to be addressed in considering a monetary integration process in Africa.

*The Need for Political Convergence*

The concept of a European community has roots that extend far into the past, but it was the pursuit of peace among European nations after World War II that ultimately led to its establishment. Economic prosperity and welfare were identified as the most effective means to achieve this objective. In addition to the economic dimension, there was also a strong political desire for closer integration among European nations. While certain projects such as the Common Agricultural Policy (CAP) and the Euro have been successfully implemented, others, such as the European Community of Defense, have faced challenges. Nevertheless, the idea of a united Europe as a single political entity has consistently served as a point of reference.

Considering the experience of the Economic and Monetary Union (EMU) in Europe, it is important to explore whether there are any political aspects that are relevant to economic integration in Africa. Political factors can significantly influence the success of economic integration initiatives. Political will and commitment to cooperation among African nations will be crucial in overcoming challenges and fostering meaningful integration. The establishment of strong political institutions and frameworks that promote collaboration, coordination, and decision-making will be vital for the effective implementation of economic integration policies. Additionally, addressing issues related to governance, political stability, and the management of inter-state relations will play a significant role in shaping the success of economic integration efforts in Africa.

Both the European economic community and the African economic community have encountered, or are still encountering, alternative competing associations. In Europe, the Stockholm Treaty of January 4th, 1959, led to the creation of the European Association for Free Trade (EAFT) in response to the initiative taken by Great Britain. The EAFT brought together countries such as Denmark, Norway, Sweden, Switzerland, Austria, and Portugal. This association provided an alternative path to economic integration in Europe.

Similarly, in Africa, the African Continental Free Trade Area (AfCFTA) is poised to be a transformative force for the continent once it is fully operational.

The AfCFTA has the potential to create the world's largest free trade area since the establishment of the World Trade Organization (WTO). It represents a significant alternative and game-changer for Africa, offering a framework for economic integration and enhanced trade cooperation among African nations.

These competing associations and initiatives highlight the dynamic nature of regional integration efforts in both Europe and Africa. They also emphasize the importance of exploring various avenues and considering different approaches to achieve economic cooperation and integration in order to address the unique needs and challenges faced by each region.

Both the European Economic Community (EEC) and regional integrations like the Southern African Development Community (SADC) have followed a progressive path toward achieving a fully integrated common market.

In the case of the EEC, the initial achievement was the establishment of the European Community for Coal and Steel in 1951, which created a common market for these industries. This was followed by the Treaty of Rome in 1957, which aimed to further economic integration by establishing a plan for a generalized trade union, implementing a common agricultural policy and market, and promoting the unification of labor and capital markets. The desire for monetary union was not initially a prominent consideration in the early stages of the EEC's formation. It was only later, with the 1970 Werner Report, that the question of monetary union gained significant attention within the European agenda.

Similarly, the SADC started as a loose association of states focused on coordinating economic development projects and reducing dependence on South Africa. Over time, it evolved and in 1997 established a free trade agreement that included South Africa as a key participant. The SADC is now considering deeper monetary and financial integration as part of its ongoing efforts.

Both the EEC and the SADC demonstrate a gradual progression toward economic integration, with an initial focus on specific industries or areas of cooperation, followed by the expansion of trade agreements and the consideration of deeper integration measures. The acknowledgment and pursuit of a monetary union were not immediate priorities for either association, but rather emerged as discussions on integration advanced over time.

Finally, both Europe and Africa have experienced a progression toward monetary integration that initially involved agreements aimed at stabilizing exchange rates.

In the case of Europe, the first step toward monetary integration was the establishment of the European Monetary Snake in 1972, which aimed to stabilize exchange rates among member countries. This was later replaced by the European Monetary System (EMS) in 1979, which further strengthened the cooperation in monetary matters and introduced the European Currency Unit (ECU) as a common unit of account.

Similarly, as Africa moves toward monetary integration, it is likely to follow a similar path of establishing mechanisms to stabilize exchange rates among member countries. This process may involve agreements or frameworks that

promote exchange rate stability and facilitate economic cooperation among African nations.

The experience of Europe with the European Monetary Snake and EMS serves as an example of how exchange rate stabilizing policies can lay the foundation for deeper monetary integration. It highlights the importance of coordination and cooperation among member countries to achieve stability and create a conducive environment for future monetary integration efforts.

Despite some similarities in the political aspects of economic integration, there are significant differences between the European Union (EU) and Africa that pose challenges to the possibility of a monetary union in Africa in the near term.

One key difference is the absence of a clear overall common economic policy agenda within Africa. In contrast, the EU had specific policies, such as the Common Agricultural Policy (CAP), that supported the establishment of the Economic and Monetary Union (EMU). The CAP, for instance, required compensation for currency fluctuations, which eventually led to the consideration of a common currency as a solution. Reports like the Werner Report in 1970 and the Delors Report in 1989 further laid out the groundwork for a future monetary agreement in the EU.

In contrast, Africa currently lacks a comprehensive plan for economic convergence and common economic policies, although recent efforts have been made to promote financial and trade integration through initiatives like the African Continental Free Trade Area (AfCFTA). Without a well-defined economic convergence plan, it becomes more challenging to establish the necessary conditions for a monetary union in Africa.

Addressing these differences and fostering a common economic policy agenda will be crucial for Africa to enhance its chances of successful monetary integration in the future. It requires concerted efforts to promote economic convergence and develop common policies that can support the stability and functioning of a monetary union in Africa.

Secondly, the long-term objectives of the European Union (EU) are indeed more ambitious than those of the African Union (AU) in terms of monetary union. The EU has pursued objectives such as peace, growth, and social progress, which have served as driving forces for its economic integration efforts. In contrast, the AU's main focus currently revolves around coordinating economic projects and implementing free trade, without exceeding these objectives in the context of monetary union.

Monetary union typically represents the final stage in the process of economic integration. It goes beyond being a mere economic agreement and is often better supported when there is a broader, overarching goal that unifies the participating nations. In the case of the EU, the vision of peace and shared prosperity has provided a strong foundation for the pursuit of monetary integration.

For Africa, it becomes essential to articulate a comprehensive and ambitious long-term vision that goes beyond economic coordination and free trade.

Setting broader goals that encompass peace, stability, and sustainable development can provide a stronger impetus for monetary union in the region. Such objectives can rally member states around a common purpose and help overcome the challenges and differences that exist among African nations.

## 7.7 What Are the Main Issues for Africa

Considering the cultural, structural, economic, and political differences across the African continent, the adoption of an African Economic and Monetary Union (AEMU) or any form of monetary integration in Africa is likely to face several challenges. Here are some key factors contributing to these challenges:

### *7.7.1 Convergence Criteria*

African countries would need to align their national legislation and meet specific conditions aimed at achieving economic convergence. These conditions, similar to those established by the European Union (EU) Member States in Maastricht in 1991, are referred to as convergence criteria. The convergence criteria serve as benchmarks to assess countries' readiness to adopt a unified exchange rate mechanism and typically focus on the following macroeconomic indicators:

1. Price Stability: This criterion aims to ensure that participating countries maintain a low and stable inflation rate. Price stability is crucial for the smooth functioning of a monetary union, as it promotes confidence in the currency and reduces uncertainties in economic transactions.
2. Sound Public Finances: Countries seeking to join the AERM must demonstrate that their public finances are sustainable in the long run. This criterion involves maintaining a reasonable level of government debt and deficit to prevent fiscal imbalances that could undermine the stability of the currency union.
3. Exchange Rate Stability: A member country should have a track record of managing its exchange rate without excessive fluctuations. This criterion assesses a country's ability to maintain a stable and predictable exchange rate, which contributes to overall macroeconomic stability and facilitates cross-border economic activities.
4. Long-Term Interest Rates: This criterion focuses on the convergence of long-term interest rates across participating countries. It aims to assess the durability of the convergence process and ensures that interest rates remain at levels that support sustainable economic growth and investment.

The Maastricht Treaty, besides specifying the convergence criteria, also emphasized the examination of other factors relevant to economic integration and convergence. These factors include the integration of markets and the development of the balance of payments. Assessing these additional factors is

considered crucial in determining the smoothness of a member country's integration into the Euro area. As outlined in the Treaty, the assessment of the convergence criteria should take place at least once every two years or upon the request of a member country with a derogation. To conduct these assessments, a commission and the central banks collaborate to evaluate the progress made by candidate countries. The findings and conclusions of these assessments are then published in convergence reports specific to each participating country. These convergence reports serve as important tools for monitoring and evaluating the readiness of member countries to adopt the Euro and join the economic and monetary union. They provide a comprehensive analysis of various economic factors, market integration, and balance of payments developments, helping to identify any potential challenges or areas needing improvement.

The African region indeed faces greater vulnerability to economic shocks compared to other emerging economies, primarily stemming from the real economy. This vulnerability can pose a significant challenge to the functioning of a successful AERM, which is designed to operate effectively in the face of temporary shocks. However, the viability of an ERM in the face of structural economic malfunctioning has not been thoroughly tested. The persistent economic instability observed in many African countries could undermine the anticipated benefits of adopting the ERM and potentially hinder its proper functioning.

The political landscape in Africa may not wholeheartedly embrace such a move. While African leaders strive for economic integration, the constraints imposed on countries' monetary policies to adopt the AERM may be perceived as an intervention that limits their sovereignty. This skepticism toward proposed monetary adjustments is rooted in the political culture of many African countries.

These factors may contribute to African countries' reluctance to adopt an ERM, as it would require them to rely more heavily on fiscal policies to manage economic shocks. However, implementing effective fiscal policies can be a slow and challenging process. Moreover, many African countries face political instabilities, including civil wars, which further complicate the adoption of a unified exchange rate mechanism.

However, the AfCFTA holds great potential to address these challenges. The AfCFTA is a strategic prerequisite on Africa's journey toward a successful AERM. This agreement is widely regarded as a transformative force for Africa, with the potential to establish the world's largest free trade area since the creation of the World Trade Organization (WTO), akin to the impact of the European Association for Free Trade (EAFT) in Europe. The AfCFTA's emphasis on trade integration aligns with the objectives of the AERM, as increased trade and economic cooperation can foster convergence among African countries. By enhancing regional economic integration and addressing the challenges associated with economic instability, the AfCFTA can provide a solid foundation for the successful implementation of the AERM.

### *7.7.2 Choice of an Anchor*

The initial adoption of the ERM in Europe involved a select group of countries, with certain currencies, notably the Deutsche Mark, exhibiting dominance over others. In the case of Africa, the challenge of implementing an exchange rate mechanism extends beyond coordination among its 55 countries. One significant hurdle would be determining which currency could serve as an anchor, considering that many African currencies lack the necessary strength to fulfill this role. Additionally, several African currencies struggle to maintain their real values and may even be overvalued. Therefore, even with the presence of an anchor currency, there could be pressures on other countries similar to what occurred in Europe.

Selecting an anchor currency for an African exchange rate mechanism would require careful consideration. It would need to be a currency that possesses stability, credibility, and a robust economic foundation. Furthermore, there would need to be confidence among African countries in the chosen anchor currency's ability to maintain its value over time.

### *7.7.3 Choice of a Central Currency*

For Africa to establish an AERM, one of the challenges would be determining a central currency. Selecting a currency that is widely accepted and stable is crucial for the functioning of the AERM. However, the issue of low intra-African trade poses a challenge. Ideally, the currencies within the AERM should be pegged to their largest trading partners. Yet, many African countries have significant trade relationships outside the continent. If Africa chooses to peg its currencies to a basket of domestic currencies, it may not yield the same results as the EU since EU intra-trade at the time of the ERM adoption was around 50%. On the other hand, pegging the currency to a basket of foreign currencies would leave Africa more vulnerable to economic shocks.

Finding a suitable solution to the issue of determining a central currency for the AERM and addressing the low intra-African trade will be crucial for the success of the mechanism. It may require a combination of efforts, including enhancing regional trade integration, promoting economic diversification within Africa, and strengthening economic ties with external trading partners.

### *7.7.4 Choice of Fluctuation Bands*

Under an ERM, there is a commitment to maintain exchange rates within a specified range around a predetermined reference rate. Adopting an exchange rate band requires policymakers to make key decisions, including determining the width of the band, selecting the central parity rate as the reference, defining the exit strategy for realignments, and establishing the intervention method to support the band. In the European ERM II, a standard fluctuation band of ±15% with a central rate of 7.53450 against the Euro was approved. However,

on January 1, 1999, the central rate shifted to 7.46038 to the Euro with a narrower fluctuation band of ±2.25%.

The formulation of a fluctuation band is an essential aspect of ERM policy determination in small open African economies. Authorities in these economies are concerned with preserving and enhancing export competitiveness and maintaining a favorable current account position, while also avoiding potential inflationary effects from nominal exchange rate depreciation. Exchange rate bands are viewed as a straightforward and verifiable system that allows policymakers to make a credible commitment against inflation while retaining some flexibility in determining exchange rates. This flexibility helps protect exports and the current account from the impact of adverse shocks to both the current and capital accounts.

### *7.7.5 Local vs Foreign Reserves Requirements*

Similar to the EU, Africa should establish requirements for both local and foreign reserves before implementing an AERM. In the EU, banks within the Euro area are obligated to maintain a certain level of reserves in their current accounts at the European Central Bank (ECB). These reserves, known as minimum reserves, are held by banks for a period of six to seven weeks, referred to as the maintenance period. The amount of reserves required is calculated based on each bank's balance sheet prior to the start of each maintenance period. Throughout the maintenance period, banks must ensure that the average level of reserves they hold meets the minimum reserve requirements. This flexibility allows banks to adjust their reserves in response to short-term changes in the money markets, contributing to the stabilization of money market rates. Currently, EU banks are mandated to hold a minimum of 1% of specific liabilities, mainly customers' deposits, at their respective national central banks. The total minimum reserves held by EU banks are published daily on the liquidity analysis page, providing transparency and oversight.

By establishing similar reserve requirements for African banks, an AERM can promote stability and confidence in the financial system. Adequate reserves help banks navigate short-term fluctuations and maintain liquidity, which is crucial for sustaining a well-functioning money market.

## 7.8 Conclusion and Recommendations

Owing to the success of the EMS, a global consensus among economists has emerged that regional exchange rate mechanisms offer a good paradigm for responding to the challenges of globalization. For Africa, there are enormous benefits not just for economic growth and development but also to economically integrate and potentially have an AERM, but also for other economic and market externalities. These benefits encompass a larger viable market size, which leads to reduced transaction costs, enhanced negotiating power for favorable trade agreements, increased Foreign Direct Investment (FDI),

economies of scale, heightened productivity due to heightened competition, improved regional macroeconomic coordination, and opportunities for export diversification and industrialization. Africa is ripe with resources and has great potential to achieve structural transformation of its economies. Hence, for Africa as a whole, the adoption of the AERM would bring impetus toward attainment of that objective as it sets the continent on a sustainable path toward development. Moreover, the AERM has the advantage of fostering economic integration, hereby strengthening the position of the African economy in international competition. For the most open and similarly structured African countries, the benefits will outweigh the costs and there remain no convincing economic objections to the mechanism.

However, the achievement of such a mechanism would entail a lot of efforts and coordination from all African counterparts. While the mechanism is feasible, it is still complicated and requires rigorous effort to function properly. For the continent to achieve a harmonized and streamlined economic integration that enhances the welfare of its citizens, several obstacles must be overcome, including infrastructural deficits, governance challenges, and political instability. Member countries need to display political willingness and unwavering commitment to implementing agreed-upon plans and programs, even if it means relinquishing some economic sovereignty to supranational institutions. A potential option could involve reviewing the Abuja Treaty to adopt a more ambitious and robust agenda, providing greater flexibility and selectivity. Integration should be seen as a catalyst, alongside other initiatives, contributing to Africa's development, growth, and long-term sustainability. The AfCFTA is the savior here; Africa should start, fiercely, implementing the agreement fully. Achieving the successful implementation of this trade agreement will be a challenging and arduous journey. Numerous obstacles, such as political turmoil, infrastructure gaps, and security threats, hinder the progress of free trade across much of Africa. The diversity of exchange rate regimes across subregional markets is particularly crucial, leading to varied responses to price, fiscal, productivity, and debt shocks. Consequently, significant misalignments and substantial growth disparities among countries arise as a result.

Weak governance in less mature democracies may hinder their ability to respond effectively to external shocks. The existence of diverse exchange rate arrangements within a single free trade area adds another layer of complexity, leading to disputes between perceived 'winners' and 'losers.' Countries with strong governance and democratic institutions, along with relatively flexible exchange rate regimes and sound monetary policies, are more likely to benefit as 'winners' through enhanced competitiveness gains. On the other hand, 'losers' are more likely to be found in less mature democracies with higher tolerance for overvalued currencies, where the AfCFTA may not yield net positive gains due to weaker competitiveness. To optimize benefits for all countries, a unified exchange rate regime is essential to enable them to start reaping gains from the agreement. This common approach can help level the playing field

and create a fairer and more balanced trading environment, benefiting all member nations.

Because membership of regional exchange rate mechanism in Africa appears to be automatic, there is a potential risk of low performing nations affecting others in the region. Yet, Africa cannot afford to leave some of the nations behind. To overcome this challenge, AU could create Regional Monetary Zones (RMZ) in each of the regions and then assist RECs to spell out criteria that countries must met before they can become members. An alternative to this may be supportive expansion of the existing monetary unions—CMA, CAEMC, and WAEMU. From these unions, AU will assist in cautionary, selective, and expansive strategy until all the nations are integrated.

Caution should be exercised when adopting the AERM on the continent. It is advisable for Africa to initially prioritize the dissolution of its regional economic communities in order to facilitate better union and financial integration. This approach would foster increased intra-trade within the blocs, promote labor mobility, and harmonize wages and prices. The establishment of a common regional mechanism, supported by regional central banks, would then emerge. Such a mechanism would assist the regions in diversifying their industrial structures, thereby enabling them to withstand trade shocks more effectively, stabilize inflation, and manage interest rates. The AU should ensure that the New Partnership for Africa's Development (NEPAD) fulfills its role in conducting peer reviews aimed at achieving economic growth, good governance, and robust fiscal policies across all economic regions. Ultimately, these efforts would lead to the convergence of regional exchange rates into a single currency managed by a continent-wide supranational central bank. This strategic approach would help minimize disruptive market fluctuations and fortify economic ties across Africa.

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CHAPTER 8

# The Dynamics of International Trade Finance in Africa

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## 8.1 Introduction

An essential strategy for encouraging a nation's exports is the use of international trade finance mechanisms, which rely on properly set up and managed credit guarantee and insurance mechanisms. International trade finance involves the provision of credit and other forms of financial support to satisfy a trader's needs during the execution of trade activity. It generally involves financing of fluctuating working capital needs for either single or bulk trade transactions (Buatsi, 2002; Grath, 2016). Trading partners in international trade are often found in nations that may be a great distance apart, hence subject to lengthy delivery periods, various regulations, as well as language barriers. Because of this, transnational or international trade in products is riskier than trade within country boundaries. One of the important choices that must be made in such

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_8

circumstances is whether the risk should be assumed by one of the trade partners or transferred to a financial institution. Moreover, the COVID-19 pandemic increased the uncertainty surrounding international trade finance, which increased the risk of non-payment for exported goods and the non-delivery of imported goods that had been paid for in advance (Crozet et al., 2022).

In addition to providing financial support for international transactions, international trade finance works to reduce the associated risks. Sometimes, banks are initially hesitant about funding international trade because of the increased risks involved. Before consenting to finance an international transaction, most banks want confirmation of the borrower's capacity to repay the loan. Over the last few decades, attempts have been made in several developing nations to establish new trade finance schemes to reduce the risks associated with international trade. Various techniques and strategies have been used, based on the particular demand, objectives, and the immediate economic and export prospects of the country concerned. To address this, the chapter discusses the dynamics of international trade finance.

The rest of the chapter is organized as follows: Sect. 8.2 provides an overview of the trade finance dynamic in Africa; Sect. 8.3 discusses the payment methods used in international trade; Sect. 8.4 examines the various trade finance instruments; Sect. 8.5 discusses agencies that facilitate international trade in Africa; and finally, Sect. 8.6 concludes the chapter.

## 8.2 Overview of Trade Finance Dynamics in Africa

Trade finance is the term used in describing the tools, techniques, and instruments that facilitate trade and protect both buyers and sellers from trade-related risks. It is an important aspect of global commerce as it facilitates cross-border transactions and reduces risks for both importers and exporters. Trade financing in Africa is a crucial tool for effecting structural change and protracted economic growth within the continent. Nonetheless, Africa only makes up about 3% of global commerce, has the lowest intra-regional trade ratio in the world, and is still too dependent on the export of raw commodities (African Development Bank, 2023). Growth rates in Africa also fluctuate following global commodity prices. To narrow the trade financing gap in Africa, policymakers, institutions, and governments must first comprehend the patterns that underlie its emergence. The growth of Africa's trade finance gap is driven by multilateral development banks' trade finance assistance programs, fluctuations in trade volume, and changes in global financial regulation (Nyantakyi et al., 2021). It is estimated that just 40% of Africa's commerce by value is bank-intermediated. This is significantly less than the worldwide average of 80% (Oramah, 2021). Even though it is decreasing, the trade financing gap (unmet demand), nevertheless, stands at an unacceptable level. The region's portion of the global trade financing gap is far more than what its proportion of global trade would suggest. The trade financing deficit was at its lowest in 2016 at US$69.3 billion, mostly because of the decrease in

commodity prices that started in mid-2015. The year 2016 witnessed the lowest value of overall African trade, which was around US$848 billion (Nyantakyi et al., 2021). When the value of African trade decreased, the conclusion was that this caused an exogenous decline in the continent's overall need for trade financing, narrowing the gap between supply and demand for finance. According to a conservative estimate, the unfulfilled demand for trade credit in 2019 was at US$82 billion. Unaddressed trade finance demand in Africa accounted for over 8% of the region's entire trade volume and 5.5% of the worldwide trade finance deficit in 2019, with the total African merchandize trade and the global trade finance deficit estimated at US$1 trillion and US$1.5 trillion, respectively (AfDB-Afrieximbank, 2020). Average unfulfilled demand in Africa accounts for 5.5% of the worldwide trade financing gap, which was estimated to be USD 1.5 trillion in 2018 (Oramah, 2021).

To fill the financing gap, many African governments and development finance institutions (DFIs) have intervened to provide trade finance. DFIs, such as the African Export-Import Bank (Afreximbank), the African Development Bank (AfDB), and the International Finance Corporation (IFC), provide financing to African businesses and help to mitigate the perceived risks. These organizations have stepped up their efforts to support intra-African trade, which has historically received insufficient attention from foreign banks. An increase in intra-African trade is anticipated as a result of the African Continental Free Trade Area (AfCFTA) agreement. More than 3000 trade transactions involving 120 financial institutions in more than 35 countries have been sponsored by the AfDB since 2013 for a total trade value of USD 6 billion. Around USD 1 billion of the overall assisted commerce was intra-African, with SMEs being responsible for 60% of all supported transactions. Also, the Bank has significantly aided in the shipment and importation of basic goods and intermediate products that are fundamental to socio-economic growth (African Development Bank, 2023). DFIs provided similar interventions to more than half of the banks that engaged in trade finance operations between 2015 and 2019 to increase their trade finance activity. DFI funding is also said to be biased toward specific sub-regions and financial intermediaries, notably foreign-owned private banks (Oramah, 2021).

## 8.3 Payment Methods in International Trade

The primary methods used in making payments for international trade transactions include open account, prepayment, documentary collections, letters of credit, drafts, and counter-trade. We discuss these accordingly.

### *8.3.1 Open Account*

An open account is a payment method that permits the buyer or importer to pay for the products after they have been delivered by the supplier. The term "open account" stems from the fact that payment is deferred or open until a

mutually agreed-upon future date. The goods are supplied before the importer makes the payment. This means since the importer only pays after the goods have arrived at the destination, the exporter is exposed to the risk of non-payment. The process usually involves the manufacture and delivery of the goods by the supplier to the importer, who then sells them and makes payment afterwards. It stands to reason that a good importer will honor the terms of the contract and pay for the amount owed, whereas a bad importer may attempt to breach the contract. Open account is considered the safest method for importers but the least secure for exporters (Crozet et al., 2022). The reliability and trustworthiness of the banking institution that owns the account created for this operation are more important to the exporter. It enables importers who have liquidity issues to have access to goods, sell and receive payment to remit to the seller. The open account method is typically employed when the exporter and the importer have a strong working relationship and mutual understanding.

### *8.3.2 Prepayment*

Prepayment is the exact opposite of an open account payment method. It requires payment to be made to the exporter before the exchange of ownership of the goods. After receiving payment, the exporter sends the importer the products together with all appropriate delivery and business documents. The prepayment conditions of trade finance are most frequently used by new-entrant importers with questionable credit histories. Under this payment method, the risk of non-payment to the exporter is eliminated, and the importer has full responsibility for the risk. Wire transfers or checks are frequently used for prepayment. Even though international wire transfers are more expensive, they are often recommended since they are quick and do not carry the risk of a failed check. Nonetheless, a considerable change in the currency rate over the course of the period before the check clears may be disadvantageous (Giovannucci, 2002). On the other hand, using a check might make it simpler to compare currency rates in different banks in search of a better one.

### *8.3.3 Documentary Collections*

It is also referred to as *bank collections* or *bills for collection,* and under this method, the exporter's bank receives the shipping and other related documents from the exporter and sends them to the bank of the importer. The importer's bank then sends the shipping-related documents to the importer once payment has been completed or a commitment to pay has been made. Unless the importer either pays the face amount in full or accepts the products at sight, the exporter maintains ownership of the goods. After receiving the necessary documents, the collecting bank invites the importer to pick up the endorsed documents. Before getting the documentation, the importer is required to pay the entire amount for the products. There is no legal power to coerce or compel the buyer to pay the value of the items if the buyer refuses to

do so or is not in a financial position to do so (Candemir et al., 2011). A documentary collection excludes payment assurances, unlike a letter of credit. Conversely, the exporter's bank sends shipping and ownership documents to the importer's bank. The documents, which provide the importer legal possession of the traded items, are only handed over to the importer when payment for the products has been received (Niepmann & Schmidt-Eisenlohr, 2017). Documentary collections may make use of a draft that demands the importer pay the face amount either immediately or at a certain future date. Whereas banks do serve as agents for their customers in the case of collections, there is no verification procedure and no remedy available to the remitting and/or collecting institutions if the payment fails in the case of documentary collections. Unlike a letter of credit, a documentary collection offers the exporter less assurance. In international trade, document collecting may be advantageous to importers and exporters alike. It can lower the cost and risk of payments, increase the speed and flexibility of payments, and enable business between well-established partners or transactions with low risk and quick payment periods. It does, however, have some possible downsides, including a lack of payment security, disagreements, delays, the difficulty and expense of document screening, and legal dangers. Compliance with international standards and regulations, effective transaction and documentation structure, cautious bank and partner selection, and strong communication and relationships with all parties involved are necessary for the proper use of documentary collecting.

### *8.3.4 Letters of Credit*

A letter of credit is an assurance offered by the local bank of the importer that should the terms and conditions of the letter of credit be met, payment would be made to the exporter. A letter of credit is issued by a bank or financial institution to the exporter indicating that the bank will make payment to the exporter on behalf of the importer. The bank then receives reimbursement from the importer or the importer's bank. Letters of credit are useful in enhancing the creditworthiness of the importer. It serves as a guarantee, assuring the exporter of payment. Letters of credit are important in international trade involving large transactions between the exporter and importer, helping the exporter mitigate country risk typically associated with international transactions. Letters of credit are also useful in domestic trade to cover the risk of non-payment. Letters of credit assume different forms, including irrevocable or revocable, confirmed, unconfirmed, or special (transferable, revolving, green clause, red clause, or standby) (Oramah, 2015). A letter of credit is perceived to be the healthiest financing option for both exporter and importer given that it secures payment for the exporter with bank guarantee and protects the importers from possible losses that may arise from the exporter defaulting (Madura, 2013; Demir, 2014). It is a preferred financing mechanism provided the quality of contract enforcement in both countries is low and fees involved are also low (Demir & Javorcik, 2020). Box 8.1 captures the advantages and disadvantages of letters of credit.

**Box 8.1 Advantages and Disadvantages of Letters of Credit**

The advantages of letters of credit include:

- The importer is guaranteed to receive the products, and the seller is guaranteed to receive payment since the issuing bank is required to fulfill the papers drawn under the letter of credit. If sufficient precautions are taken, the importer is also guaranteed to get the specified items on time.
- If the importer is unable to obtain a line of credit from the supplier, the issuing bank provides the credit to the importer against a letter of credit, allowing the seller or exporter to secure payment if they need money right away.
- A letter of credit serves as proof that the importer has adhered to any exchange control laws that may have been in effect in that country.
- The exporter may ask their bank for a loan against a letter of credit for the export of products (pre-shipment advance).

The disadvantages of letters of credit include:

- The supplier could be successful in getting paid by delivering subpar items or faking the paperwork.
- Fees charged by the issuing bank for the issuance of a letter of credit do not need to be paid in the case of an open account system.
- The applicant may be required to utilize his/her capital as collateral security against the letter of credit, which results in a reduction in their cash flow.
- Since the documentation of title to the products is handled by several banks in various countries, it usually causes a delay in the prompt delivery of goods to the importer promptly.
- If the exporter is unfamiliar with the right processes, there may be differences in the paperwork, in which case the bank will deliver those on a collection basis.
- Certain papers may include legalities that are difficult to meet or hard to get.
- The exporter might not be able to understand letters of credit if they are sent in the language of the importing nation.

### *8.3.5 Drafts, Bill of Exchange*

A draft is a written order from one party asking the other to make payment to a third party. It may be a sight draft or time draft. In the case of a sight draft, the exporter sends the shipping documents and a sight draft through their bank to the importer's bank after making the transaction. The importer is then required to make payment of the draft as soon as they receive or see it. On the other hand, using a time draft will require the importer making payment on a specified future date following the importer's acceptance of the draft and

receipt of the goods. Considering that the bank's obligations cease with the money being exchanged for papers, there is no recourse with them for either a sight draft or a time draft (Madura, 2013; Giovannucci, 2002).

A bill of exchange is an unconditional written order by one party addressed to another party, signed by the party issuing it to impress upon the addressee to make payment of a specific amount of money on demand or at a specified future date to the order of a specified person, or to the bearer (Oramah, 2015).

### *8.3.6 Counter-trade*

The presumption up until now has been that products are supplied in exchange for money at sight or at a later time. However, there are transactions in which payment or settlement is done either fully or partially in other ways other than money. The term, 'counter-trade', is a generic term that refers to a number of interconnected transactions or reciprocal agreements that are interconnected in a bigger structure and are required to complete the individual transactions. The most common circumstances in which counter-trade is used are when a buyer lacks access to convertible currency, considers rates to be disadvantageous, or has the ability to exchange for items or services that the seller wants (Giovannucci, 2002; Bishop, 2004; Madura, 2013 Grath, 2016). The term used to characterize the most typical types of alternative trade transactions may vary, although they mainly include barter trades, compensation trades, repurchase agreements, and offset counter-trades. Barter trades involve making payment in kind (with another good), compensation trades entail part payment in money but also in other goods or services to balance the transaction as agreed upon by the parties, repurchase agreements require making payment through products generated by the equipment or goods delivered by the seller, and offset counter-trades mechanism concentrates mostly on settlement in money but is dependent on corresponding sales/purchase transactions to balance the payment stream (Bishop, 2004; Grath, 2016). Counter-trade is a particularly complicated area of trade transactions, in large part because of the commonly occurring seller's lack of comprehensive understanding of potential goods or products that are suitable or accessible to arrange the entire deal as well as their frequent lack of direct contact with other potential commercial parties. In these combined transactions, the structure becomes more intricate making it harder to analyze and cover the risk.

## 8.4 Trade Financing Instruments

International trade generally requires some sort of trade financing, and businesses in Africa and other low-income economies consider difficulty in gaining access to capital as one of their three leading export obstacles (Nyantakyi et al., 2021). The main trade financing instruments include line of credit, pre- and post-export financing, accounts receivable financing, as well as forfaiting and factoring (Bishop, 2004; Madura, 2013; Bhogal & Trivedi, 2019).

### 8.4.1 *Line of Credit*

A line of credit is a contract that a financial institution, often a bank, enters into with a client, which specifies the highest loan sum that the bank will allow the borrower to keep (Oramah, 2015). It is an agreement between a borrower and a financial institution in which the bank promises to lend the borrower a specific sum of money, which the borrower may use as needed. As long as they don't go over the agreed-upon cap, the borrower is permitted to draw down on the line of credit whenever they want. The line of credit gives companies access to simple and adaptable funding. It enables companies to take out loans as required to fulfill short-term cash flow requirements like inventory purchases, payroll costs, etc. A line of credit has several benefits over a traditional loan including the fact that the borrower can utilize the line of credit whenever they need to and that interest is often not assessed on the portion that is unused (Oramah, 2015). A line of credit offers a safety net to cover unanticipated costs, which helps firms manage their cash flow more effectively. Based on the terms of the loan arrangement, a line of credit can be categorized as a demand loan—having a deadline by which all unpaid debt must be satisfied, or be evergreen—which means there is no deadline. According to the terms outlined in the line of credit arrangement, evergreen lines of credit may be canceled. A line of credit can also be revolving (the borrower may pay off and redraw available loan amounts within the line of credit's concession period) or diminishing (amounts repaid may not be redrawn).

### 8.4.2 *Pre- and Post-Export Financing*

**Pre-export financing** is a type of trade finance that enables exporting firms to finance the manufacturing of products before they are exported. It provides the exporter with enough cash to maximize production for export (Olugbemi, 2020). Pre-export finance is typical in deals involving capital-intensive production and operations. It is often employed to pay for the hiring of personnel, the purchase of raw materials, and other manufacturing expenses. Pre-export finance is used to ensure that firms have the funds they require to produce for the export market. The exporting firm, the financial institution providing pre-export financing, and occasionally the importer are all parties to a pre-export financing arrangement. The importer is usually required to make payment of the goods into the collection account, which is managed by the financing institution, so that the financing institution can deduct the loan amount, interest, and other charges before forwarding the balance to the exporter. Box 8.2 describes the procedures involved in pre-export financing.

**Post-export financing** is also a type of export credit that aids firms to finance the sale of products after they have been shipped. It is a brief loan made available to an exporter on the basis of shipping documents in exchange for a shipment, and its period is from the date of shipment to the bill realization date (Olugbemi, 2020). It involves the provision of finance by a bank to an exporter

**Box 8.2 Procedures Involved in Pre-export Financing**
The procedures involved in pre-export financing include:

i. The exporter submits an application for pre-export finance to a bank and gives the required financial and personal details.
ii. The bank decides on the lending amount and interest rate after considering the exporter's creditworthiness, financial statements, and business strategy.
iii. The exporter then utilises the credit to finance the production of the goods for export once the pre-export financing has been granted.
iv. The exporter repays the loan and interest within a certain period of time.

**Box 8.3 Post-Export Financing Procedures**
The procedures involved in post-export financing include:

i. The exporter submits an application for post-export financing to a lender together with the appropriate financial and personal data.
ii. The lender determines the funding amount and interest rate after considering the exporter's creditworthiness, financial statements, and the caliber of its export receivables.
iii. Upon approval of the post-export financing, the exporter may utilize the loan to support activities while awaiting payment from the importer.
iv. The exporter is required to repay the loan and interest within a certain period of time, usually when the buyer pays the exporter.
v. If the financing is set up as a forfaiting transaction, the lender or financial institution takes on the risk of non-payment if the importer defaults on the repayment. With various forms of post-export finance, it may be up to the exporter to pay back the loan.

based on a shipment that has already been made. It is meant to finance export sales from the shipment date to the date when exports proceeds are realized. It helps exporters to meet their working capital requirements allowing them to provide credit terms to importers. In situations of deemed exports, it is extended to finance receivables arising from sales to domestic designated agencies or trading firms that provide exporting services to firms, especially small export manufacturers. Financial institutions that provide post-export finance, typically, control the shipping documents and remit same to the presenting bank, ensuring repayment of loan is granted (Oramah, 2015). Box 8.3 also describes the procedures involved in post-export financing.

### 8.4.3 Accounts Receivable Financing

In accounts receivable financing, the financial institution grants a credit to the product's supplier that is secured by the accounts receivable's assignment. Accounts receivable financing is any sort of financing that notably depends on accounts receivable, either as collateral or as a prerequisite for eligibility (Cunat, 2007). An exporter or any firm can acquire finance from a financial institution by selling the invoice, such as through invoice discounting or factoring. The exporter simply uses its accounts receivables either as collateral or as a prerequisite for eligibility. This sort of financing, which distinctively depends on accounts receivables, is especially helpful if there is a time discrepancy between the cash inflows and outflows of the firm. Accounts receivable financing may take the form of factoring, collaterising, or invoice discounting (Sindani, 2018). For instance, in factoring, the factor will pay less to buy the seller's accounts receivable, which is regarded as the underlying asset for factoring purposes. The leftover amount, less interest and service charges, is paid to the seller once the accounts receivables have been paid to the factor. When a financial institution finances an accounting receivable, it lends to the product's provider—in this case the exporter—depending on that exporter's trustworthiness. The exporter is still responsible for paying the financial institution if the importer defaults in making the payment. Before settling overseas debts, exporter and financial institutions typically get export credit insurance to cover the risk involved.

### 8.4.4 Forfaiting and Factoring

**Forfaiting** involves the purchase of specific receivables arising from export of goods by an exporter without recourse to the exporter. The forfaiter assumes the risks associated with the receivables but earns a margin. Forfaiting is mostly used when an exporter is supplying capital goods and is required to provide export credit for a longer duration, such as up to five years or more. The forfaiter will then provide a price that is a discounted rate, which will be applied to the paper and is based on the primary cost of funds plus a margin. The exporter is able to lock in their profit from the outset by having a fixed price provided for a shipment that will take place up to six months in the future. Forfaiting is a unique form of trade-related discounting and often fixed-term interest bills of exchange with various settlement dates without recourse to the exporter. It can be done through specialist departments inside banks or through independent forfaiting firms. The accounts receivables purchased may include promissory notes, drafts drawn under letters of credits, book debts of exporters, etc. (Oramah, 2015). Although forfaiting often requires bigger transactions to be cost-effective, commercial banks now frequently do this type of financing as non-recourse invoice discounting (Bhogal & Trivedi, 2019). Box 8.4 describes the procedures involved in procedures involved in forfaiting, while Box 8.5 identifies the advantages and disadvantages of forfaiting.

**Box 8.4 Procedure of Forfaiting Transaction**
The procedures involved in forfaiting include:

i. The exporter enters a contract to offer products or services on credit to an importer, with payment due in the future.
ii. The importer provides a bill of exchange to a third-party bank, and the bank sends the bill of exchange to the exporter.
iii. The exporter wants to receive payment immediately and avoid the risk of non-payment by the importer, so they contact a forfaiter.
iv. The forfaiter offers to buy the exporter's receivables at a reduced price. In exchange for the discount, the forfaiter assumes the risk of the importer's non-payment, while the exporter receives payment immediately. As receivables become due, the forfaiter collects payment from the importer, typically by a bill of exchange or promissory note.
v. The forfaiter's profit is the difference between the discounted price paid for the receivables and the amount recovered from the importer.

**Box 8.5 Advantages and Disadvantages of Forfaiting**
The advantages of forfaiting include:

- Due to the forfeiter's acquisition of receivables "without recourse," the supplier can totally eliminate the bankruptcy risk posed by the importer.
- The exporter is protected from late payments and bankruptcy brought on by governmental, credit, and transfer-related events.
- By not having to deal with debt collection, the exporter saves time and effort.
- In comparison to rivals that do not use forfaiting and cannot provide medium- or long-term supplier credit financing, the exporter may have a significant competitive advantage.
- Due to the ease with which receivables may be transformed into cash upon submission of the bill or promissory note, the supplier can offload exchange rate risk and increase liquidity.
- The exporter may use forfaiting in conjunction with several government export finance programs, and, if available, may be eligible for local government subsidies.
- Until the contract is signed, the exporter keeps in touch with the importer directly and controls all financial and business discussions.

(*continued*)

**Box 8.5 (continued)**

- The importer is able to acquire full financing and avoid making advance payments; the buyer is able to allow for grace periods, while still linking repayments to anticipated revenue.
- The importer helps to make budgeting easier and more secure by allowing the accumulation of interest at a set rate for the whole term of the loan.
- The importer is able to obtain medium- to long-term financing that is usually not feasible or affordable locally in other circumstances.
- The supplier's government-sponsored export subsidy schemes may be useful to the importer.

The disadvantages of forfaiting include:

- Finding a company ready to guarantee the buyer's duty may be challenging.
- The guaranteeing company may levy a significant service fee unless the consumer is deemed creditworthy.
- The commitment fee must be paid up front, and late receivables may result in penalties.
- If the interest rate falls, the fixed interest rate might be expensive; there are no interest rate subsidies, and expenses can be significant.
- From the perspective of a bank, there is no legal framework in existence to protect the banker or financial institution conducting forfeiture. As a result, they face the risks associated with international transactions, including those related to politics, exchange rates, and other factors.
- From a supplier's perspective, it is expensive because of the high forfeiture fees banks impose due to the huge risks involved.

**Factoring** is a form of supplier financing in which businesses offer creditworthy accounts receivable at a discount in exchange for immediate funds. It is a transaction in which a firm sells its accounts receivable at a discount to a third party known as the "factor", In this case, the factor or bank buys the accounts receivables at a discount, of payments and also takes charge of managing the sales ledger. Factoring may be with or without recourse to the exporter (Klapper, 2006; Oramah, 2015; Boissay et al., 2020). Since these receivables represent liabilities of buyers who are more creditworthy than the sellers themselves, factoring may, thus, be especially well suited for financing receivables from large or multinational companies. Factoring may provide traders in developed and emerging nations crucial export services. Similar to conventional commercial lending, factoring offers working capital financing to exporters. According to Vaddepalli (2014), businessmen can gain from factoring by concentrating their productive time on their core businesses and having predictable cash flows with lower credit risks. However, with the development of the

communications and transport system, the need for exporters to store goods for sale abroad has diminished and factors have shifted their activities from storage, marketing, and distribution services to financial services (Negescu et al., 2020). Box 8.6 describes the procedures involved in factoring, while Box 8.7 identifies the advantages and disadvantages of factoring.

**Box 8.6 The Procedures of Factoring**
The procedures involved in factoring include:

i. The supplier gets the importer's export order.
ii. The exporter gets in touch with the export factor and transmits the necessary data.
iii. After choosing an import factor by the export factor, the export factor contacts them.
iv. Import factor determines the importer's creditworthiness and sets a credit limit against them.
v. The exporter sends the products to the buyer.
vi. The allocated invoice receives a cash advance from the export factor.
vii. The money is collected by import factor at the time of maturity.
viii. Import factor transfers the remaining funds to export factor after subtracting its fees.
ix. Export factor pays the exporter the balance due on the invoice after subtracting its fees.

**Box 8.7 Advantages and Disadvantages of Factoring**
The advantages of factoring include:

- The factor quickly increases cash flow within a short period of time.
- It may be a financially advantageous technique to outsource sales ledger, while freeing up the owner's time to run the business.
- If consumers (buyers) make on-time payments, businesses may receive vital information about the credit status of the clients.
- The buyers can bargain with suppliers for better terms.
- When preparing for business expansion, factors may be a great financial and strategic resource.
- If a business decides against recourse factoring, it will be safeguarded from bad debts.
- As soon as the factor receives the invoices, it releases the cash to the exporter.

(*continued*)

**Box 8.7 (continued)**

- Exporters gain from decreased credit administration time, credit loss protection, and risk mitigation.
- It also offers foreign consumers competitive open account terms as well as revenue growth through effective and competitive terms of sale.
- Businesses employ factoring to reduce administrative and overhead expenditures.

The disadvantages of factoring are:

- It could cost more than an overdraft or loan from a bank.
- As a result of the lack of book debts as security, there may be less opportunity to borrow from the bank.
- Before a firm sells its products, factors could or might want to screen the buyers.
- If a firm must terminate factoring quickly, it may be challenging since it will be required to repay whatever funds the factor has advanced on invoices if the clients have not yet paid them.
- If there is a dispute, it could take a while to resolve.
- People who provide subpar services might hurt the exporter-importer collaboration in company.

## 8.5 Agencies That Facilitate International Trade in Africa

Disagreements, high tariffs, trade barriers, and other contentious problems are inevitable in the process of state-to-state interactions. The importance of adjustment of structurally unstable economic conditions and the creation of institutions necessary to ensure a significant reduction in tariffs and other trade barriers, as well as the elimination of discriminatory treatment in international trade relations are well recognized. In addition to considering the interpretation and application of the different agreements entered into among partners under its framework, this institution may offer mechanisms for the settlement of trade and investment disputes between state parties. It is necessary for international, regional, and national organizations to be established through trade agreements in order for international trade to grow significantly. We discuss a few of such organizations that facilitate international trade in Africa, which include the World Trade Organization (WTO), the African Continental Free Trade Area (AfCFTA), the African Export-Import Bank (Afreximbank), as well as the ECOWAS Bank for Investment and Development (EBID).

### *8.5.1 World Trade Organization (WTO)*

The World Trade Organization (WTO) is a global institution which has its headquarters in Geneva, Switzerland. It was founded on January 1, 1995, as a

replacement for the General Agreement on Tariffs and Trade (GATT) with the aim of encouraging fair trade regulations and creating an environment that is more conductive to the interchange of goods and services while facilitating free commerce. The fundamental tenets of the WTO govern and guide its decisions on agreements and policies. The guidelines that stand out the most are the Most Favoured Nation (MFN)[1] and the national treatment principles. With regard to any tariffs or concessions imposed in relation to a branded commodity, participants are obligated to handle all other countries that sign the Agreement equally and precisely as they would have handled any other party, under the MFN rule, which aims to prevent bias among nations. As part of the national treatment principle, member states are expected to handle commodities once they cross their boundaries in a manner that is consistent with how they would treat goods that originated in their own nation. This is a precautionary step to stop governments from using internal rules to discriminate against imported goods, which would harm the decrease of tariffs and other trade liberalization efforts. The WTO was established to ensure the elimination of discriminatory practices in international trading relationships as well as promote major reduction in tariffs and other trade barriers. It recognizes the importance of restoring equilibrium to the inherently imbalanced economic situations (Ayres, 2015). Herbert (2020) surmised that the WTO's six primary goals are establishing and enforcing a structure for global trade; providing a platform for debate and supervision of further trade openness; highlighting trade negotiations; guaranteeing accountability in the decision-making procedures; enabling collaboration with other strong international economic structures engaged in world economic management; and assisting emerging economies to greatly benefit from this.

*Functions of the WTO*

The WTO performs a number of functions that include:

1. It designs trade policies that promote economic globalization, liberalize cross-border trade and investment, and provide binding dispute resolution processes to deal with trade disputes between member countries.
2. It serves as a platform for member nations to convene and discuss the conditions of trade liberalization treaties.
3. It establishes clear standards of engagement to support a more transparent and dependable environment for international trade.
4. It supports trade discussions between nations by providing a framework for the agreements and by offering dispute resolution procedures.
5. It ensures that the signatory nations uphold their promises.

[1] The Most Favoured Nation principle was designed by the WTO to prevent countries from giving different treatment to one partner over the other. It requires members to accord the most favourable tariff and regulatory treatment given to the product of any one member at the time of import or export of "like products" to all other members.

6. It serves as a dispute resolution body in the event of trade dispute between its member nations.
7. It offers particular initiatives to benefit poor nations by assisting them in enhancing their capacity to engage in free trade with more affluent nations.
8. As part of its wider goals to promote free trade, the WTO engages in lobbying and outreach around the world. It attempts to encourage governments to lower trade restrictions so that there are free, equitable, and open markets everywhere.
9. It establishes defined rules of engagement to guarantee more predictable and transparent global commerce.

*Challenges of the WTO*

Even while the WTO has been praised for its contribution to global commerce, it has not always been without problems. There is a school of thought that the WTO mainly benefits industrialized nations that have the financial, material, and technical resources to compete in a global market. For instance, Solanki (2012) suggests that while developed nations need to reduce trade barriers and open their markets to developing countries, wealthy countries have covertly done the opposite by using tariff and non-tariff obstacles to block developing countries access to their markets. It is also disheartening to see that the advantages of increased global trade are not shared equally and that emerging nations only contribute a small portion of global trade flows, while having a large population (Herbert, 2020). Some of the major difficulties the WTO faces in performing its duties include the prolonged time needed to conclude a negotiation round, failure to keep up with the evolving global trade landscape, the fragmentation of trade blocs within the WTO member states, and the challenges in resolving the trade imbalance between developed and developing countries.

The WTO has contributed significantly to promoting global trade and investment. If member countries commit to dealing with the challenges that the WTO is confronted with, the expected benefits in terms of increased trade and investments among member countries would be largely realized (Abor et al., 2020).

### *8.5.2 African Continental Free Trade Area (AfCFTA)*

The African Continental Free Trade Area (AfCFTA)—the largest free trade agreement on the globe—rejects traditional, neoclassical, and Marxist trade theories in favor of non-aligned Pan-Africanism. It advocates for intercontinental trade liberalization as a method of eradicating the aftereffects of slavery, imperialism, and neo-colonialism (Obeng-Odoom, 2020). The AfCFTA was introduced in 2010 and endorsed in 2019 with the purpose of creating a device that can be used to best serve the continent by leveraging its many trade and investment opportunities as well as contribute favorably to the structural transformation of African economies and the eradication of poverty. The AfCFTA

promises a new trade structure. Liberating Africa from the limitations of economic stagnation is its main objective. In essence, the AfCFTA seeks to disseminate information on how to prevent trade disputes, future economic downturns, and global political crises. Aniche (2020) surmised that achieving pan-African security, economic, and political transformation is one of the goals of the AfCFTA. It also seeks to spread the pan-African concept or ideology of regionalism throughout Africa. Additionally, it aims to support progress led by the private sector by boosting industrial competitiveness through large-scale manufacturing opportunities, access to global markets, and effective resource redistribution. In order to speed up economic change and put the area on a long-term development path, the AfCFTA may reduce flow of capital and alter the mix trajectory of Foreign Direct Investment (FDI) (Oramah, 2021). With the recent launch of free trade under the AfCFTA, advancement in trade finance has also experienced significant pace and growth (African Development Bank, 2023).

Generally, the AfCFTA strives to open up the market for goods and services through successive phases of bargaining to solve the problem of different and interconnected memberships, use industrial growth to broaden and create regional revenue streams, enhance agricultural expansion, accomplish food security, and to assist in keeping the emerging markets of the AfCFTA parties attractive inside the African continent and globally. It was also created in order to encourage inclusive macroeconomic stability through reshaping thereby laying the foundation for a Continental Customs Union, speed up intra-African capital investment, lift constraints on the movement of capital and people while preserving supervision, as well as control and work with the Regional Economic Communities, while creating a single marketplace for goods and services that coincide with unrestricted human movement. Box 8.8 provides some details of the AfCFTA.

**Box 8.8 The African Continental Free Trade Area (AfCFTA)**
According to the number of member countries, the African Continental Free Trade Area (AfCFTA) agreement aims to create the largest free trade territory in the world. The pact connects 1.3 billion people in 55 different countries with a combined GDP of US$3.4 trillion. It might help 30 million people transcend severe poverty by 2035 and increase real income gains by 7%, or nearly US$450 billion (in 2014 prices and market exchange rates). The AfCFTA significantly boosts trade between Africa, particularly industrial trade within the region. All exports are estimated to almost double in size by 2035, continental trade may rise by almost 81%, and exports to countries outside of Africa are expected to increase by

(*continued*)

**Box 8.8 (continued)**

19%. The AfCFTA paradigm may lead to a 62% total rise in industrial output, a 110% increase in intra-African trade, and a 46% increase in exports to the rest of the world. There may be a 49% rise in intra-African trade as well as a 10% increase in extra-African trade. Less dramatic growth has been observed in the services sector with global growth of about 4% and a rise of 14% in Africa. The AfCFTA agreement aims to boost regional output and productivity as well as reallocate funds across various states and sectors. By 2035, the production of the entire continent is estimated to be 212 billion US dollars more than the baseline. The highest production rise may be in natural resources and services (1.7%), while manufacturing witnesses a 1.2% increase. Agricultural output is, however, expected to decline by 0.5% on a continental scale (in comparison to the 2035 baseline). The services sector promises a rise of US$147 billion, followed by the industrial sector with US$56 billion, and natural resources with US$17 billion. By 2035, compared to the base case, agricultural production is expected to decline by $8 billion. All of Africa, currently, witnesses more agricultural growth than the baseline in 2035, except North Africa, which has begun a shift toward manufacturing and services as a result of the AfCFTA.

Source: World Bank (2020).

### *8.5.3 African Export-Import Bank (Afreximbank)*

In order to support and finance intra- and inter-African trade, the African Export-Import Bank (Afreximbank) was established as an international financial institution in 1993. The Bank was established with the aim of promoting the steady growth, diversification, and progress of African trade while serving as a premier profit-driven financial institution and a hub of knowledge in matters pertaining to African trade. The stakeholders' topmost concerns at the time the Bank was conceived were the extremely low levels of trade within Africa, the fall in trade and project finance streams, the deteriorating budget deficit condition of many African countries, and the dramatic drop in lending to Africa by international commercial banks (Bank, & D'Import-Export, 2004). The Afreximbank was required to use three major tools—credit, advisory services, and credit insurance—to expedite, encourage, and increase intra- and extra-African commerce (especially trade between Africa and the South). The Bank's charter was revised in 2012 to include providing capital to African companies and importers through equity investments, including but not limited to shares, share warrants, redeemable preference shares, and loans (Klasen,

2019). The creation of the Afreximbank was intended to facilitate successful advancement of intra-African trade and mitigate perceived high-country risks that were exacerbated by the debt crisis of the 1980s. Almost all of the African nations, at the time, experienced difficulties in paying their foreign debt. Moreover, many of the 55 African countries, hitherto, lacked the means to start a reasonable-sized Export-Import bank to leverage the external funding required by each nation to advance commerce and diversify exports. Afreximbank aims at providing and increasing access to credit to eligible African shipping sectors through offering pre- and post-shipment financial support, enhancing indirect short- and medium-term financing to African importers and exporters, financing imports required for export formation, encouraging, and financing the export of non-traditional African goods and services, as well as encouraging and providing insurance and guaranty services (Devex, 2019). We provide some details of the Afreximbank in Box 8.9.

**Box 8.9 African Export-Import Bank (Afreximbank)**

Afreximbank offers a comprehensive range of trade finance products to support trade while seeking to support and promote intra- and extra-African trade. The Bank's trade finance programs comprise dual recourse programs such as Note Purchase, Receivables Purchase/Discounting including forfaiting, factoring, and invoice discounting. Its first product offerings comprised the Lines of Credit, Direct Financing, Syndications, and Special Risk. The product selection has grown over time to now include the following: Note Purchase, Financial Future Flow Pre-financing, Project-Related Financing, ECA Loans Facilitation, and Export Development. Since 2012, a number of special products aimed at developing critical sectors have been put in place and these include the Construction and Tourism Linked Relay Facility, which fosters the growth of the region's tourist industry; the Africa Cocoa Initiative, which supports cocoa value addition; the Construction and Medical Tourism Relay Facility; and the Countercyclical Trade Liquidity Facility, which was established in 2015 to enable orderly adjustments to commodities market volatility; the Food Emergency Contingent Trade Funding Facility; as well as the Central Bank Deposit Program (CENDEP), which allows African central banks to mobilise deposits. The Afreximbank's operational strategies have been focused on achieving both macro- and corporate-level goals. Africa's trade in goods rose from US$234 billion in 1995 to US$1 trillion in 2010, then fell to US$950 billion in 2015.

(*continued*)

**Box 8.9 (continued)**
Intra-African commerce increased from US$21 billion in 1995 to around US$146 billion in 2015, with a corresponding increase in its proportion of global trade from 9% to 15%. According to estimates from the bank, it aided with around 30% of the member nations' overall trade financing requirements between 2015 and 2016. Shortly after the Bank's establishment in 1995, the Line of Credit, Direct Financing, and Special Risk Programs accounted for 6%, 74%, and 10%, respectively, of total loan authorizations. Agriculture, metals and minerals, and energy dominated accounting for a combined 92% of the Bank's authorisations in 1995. Commercial banks' role as intermediates in the Bank's service delivery has grown over time to the point where their proportion of authorisations reached 84% in 2016 (up from 12% in 1995). Due to its low-risk nature, this strategy has allowed the Bank to accommodate increasingly unconventional export financing. The three primary products—Lines of Credit, Direct Financing, and Special Risks—continue to be the most prevalent products in terms of product offering. Yet as the focus has shifted from commodity finance to value-added and services export financing, and new products have been introduced, the Projects and Export Development Financing Facility began to gain prominence in 2000. Facility approvals increased from US$10 million to over US$880 million by 2016.

Source: Oramah (2020), AfDB-Afrieximbank (2020)

### *8.5.4 ECOWAS Bank for Investment and Development*

The ECOWAS Bank for Investment and Development (EBID) is the principal financial institution of the Economic Community of West African States (ECOWAS). The Bank is a multilateral financial institution with two funding avenues for fostering the expansion of both the public and private sectors. Overall, EBID supports ECOWAS programs and projects that focus on manufacturing, poverty reduction, the environment, and natural resource management in order to aid West Africa's economic development (Ogwezzy, 2014; EBID, 2020). Over the years, the bank has evolved into a fully-fledged development finance institution (DFI). Further, for more than 40 years, it has concentrated on assisting member states in overcoming institutional, social, and infrastructure challenges in the ECOWAS sub-region by funding projects under its private and public sector windows. According to EBID (2020), the Bank provides direct medium- and long-term concessionary or non-concessionary

loans to the public sector. It also provides direct short- and medium-term loans to the private sector, as well as lines of credit, framework agreements for refinancing the national financial institutions of member states, and loans that are granted and/or guaranteed. To promote commerce among the community member states, EBID also contributes to the promotion of intra-regional trade. The Bank is also instrumental in financing trade finance in the sub-region. For instance, the Bank announced a dual-currency trade finance credit line totaling around US$130 million in 2023 which was secured from the African Development Bank (AfDB) and aimed at enhancing food security and strengthening agricultural value chains across the West African sub-region.

### *8.5.5 Domestic Export-Import Banks*

EXIM Banks are mostly founded in capital-scarce developing economies with most of the banks committed to providing direct lending to exporters. This situation has been attributed to the relatively shallow nature of the financial sectors in many developing countries. The financial systems in many developing countries are characterized by limited access to credit and high cost of credit, thus placing exporters in these countries at a disadvantage in the international market. Also, many banks in developing economies tend to be weakly capitalized and often lack knowledge of global markets, thereby resulting in limitation of their ability to operate viable export finance businesses (Oramah, 2020).

In Africa, EXIM Banks have a relatively short history compared to EXIM Banks in other regions. The first African EXIM Bank was established in Nigeria in 1991, followed by South Africa in 1994. Since then, many other African countries have established their own EXIM Banks, including Kenya, Ghana, Egypt, Mauritius, Mali, Togo, and Rwanda. The functions of EXIM Banks in Africa are similar to those in other regions. They provide financing and insurance to support international trade, including offering loans, guarantees, and credit insurance to businesses involved in exports and imports. They also provide other services such as market research, export credit counseling, and assistance with export licensing and compliance to businesses involved in international trade. By supporting trade within the continent, EXIM Banks in Africa help to promote regional economic integration and cooperation. While there are several challenges that must be addressed, the potential benefits of African EXIM Banks make them an important tool for promoting economic development and poverty reduction on the continent (Ayodele, 2017). We provide some details of an EXIM Bank in an African country—the Ghana Export-Import Bank (GEXIM)—in Box 8.10.

**Box 8.10 Ghana Export-Import Bank**

The Ghana Export-Import Bank (GEXIM) was founded in line with the Ghana Export-Import Bank Act 2016 (Act 911) to support the Government of Ghana's long-term transformation toward a viable and sustainable export-led economy. By promoting and expanding commerce between Ghana and other nations, the GEXIM aims at facilitating Ghanaian businesses' foreign investments, eliminating significant market imperfections in the Ghanaian economy, and increasing Ghana's competitiveness in the world market. The GEXIM evolved after the merger of three DFIs and these are Export Trade, Agricultural and Industrial Development Fund (EDAIF), Export Finance Company (EFC), as well as Exim guaranty Company Limited (ECL). GEXIM provides pre-shipment credit facilities, post-shipment credit contingent liabilities, export development financing, international investments, project exports, and research and consultancy services. The Ghana EXIM Bank is tasked with acting as the country's primary institution for export financing as well as supporting and developing the country's ongoing trade and investment operations. Currently, the primary source of funding for the authorized 1D1F Projects is the Ghana Exim Bank. The bank has made definite agreements to assist 81 initiatives, with a total financial demand of GH1.337 billion. To date, GEXIM has released GH 514.55 million, leaving a funding deficit of GH822.67 million. GEXIM started a capital-raising initiative with the goal of obtaining long-term financing from international financial institutions by utilizing the funds from its portion of the import levy in order to address these funding gaps.

Source: Boye (2022), Abor (2023)

## 8.6 Summary and Conclusion

International trade is the movement or exchange of goods and services across national boundaries, allowing customers access to products and services that are either unavailable or more expensive to access in their home countries. The expansion of international trade operations throughout time may be linked to both the globalization of the global economy and the creation of trade financing programs. The payment procedures used in international commerce, trade financing strategies, and the organizations that support international trade are discussed in this chapter. The primary payment methods in international trade were identified as open accounts, prepayment, documentary collections, letters of credit, drafts, and counter-trade. Moreover, some of the most prevalent instruments used in financing international trade include line of credit, pre- and post-export financing, accounts receivable financing, as well as forfaiting and factoring. The WTO, AfCFTA, African Export-Import Bank, ECOWAS Bank for Investment and Development, and domestic Export-Import banks are some of agencies that facilitate international trade.

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CHAPTER 9

# The Economics of Structured Trade Finance in Africa

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## 9.1 Introduction

Financing trade development in Africa has been challenging considering the low level of development in the financial system. A number of factors are responsible for the low development in the financial system and the low level of financial inclusion on the continent. These factors include weak governance, lack or insufficient collateral facilities, low literacy levels, high levels of credit risk, and the low-income level of the populace. Although Africa's financial systems have experienced some growth over the past 20 years, there is evidence that the financial systems remain small and inadequate in meeting the financing needs of businesses. Financing is dominated by banks and underdeveloped stock markets with limited liquidity.

Given the nature and challenges of Africa's financial systems, some financing models have been identified to bridge the financing gap. Firms that are involved

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_9

in international trade can finance their trade activities using these models. Amongst these is the use of structured trade finance; as it can address the problem of collateral by placing emphasis on ring fencing the receivables, transaction security through the use of collateral managers in the case of commodities and documentation instead of relying on balance sheet of the business. Due to the complex nature of conventional lending, this form of finance is utilised as an alternative in developing economies. Structured trade finance has been identified as a vital pathway to boosting international trade in Africa. For instance, the African Export-Import Bank (Afreximbank) has been instrumental in promoting African trade through structured trade financing. The chapter examines the economics of structured trade finance in Africa.

The rest of the chapter is structured as follows: Sect. 9.2 discussed the evolution of structured trade finance; Sect. 9.3 defines structured trade finance and identifies some structured trade finance products; Sect. 9.4 distinguishes between structured trade finance and conventional finance; Sect. 9.5 examines the various structured trade finance instruments; Sect. 9.6 identifies the advantages or benefits of using structured trade finance; Sect. 9.7 discusses the challenges associated with structured trade finance; Sect. 9.8 discusses Africa's experience with structured trade finance; Sect. 9.9 explains the preconditions for enhancing the use of structured trade finance, and finally Sect. 9.10 concludes the chapter.

## 9.2 Evolution of Structured Trade Finance

Structured trade finance is said to have evolved in the mid-1980s during the debt crisis when many international banks reduced credit extension to developing countries, especially those in Africa. Structured trade finance is an alternative approach to enterprise finance, which focuses on transaction-based lending. The technique originated from the Latin American financial crisis in the mid-1980s and has since been seen as an innovative means of financing international trade by not relying on balance sheet analysis, government guarantee, and tangible assets as collateral but rather relying on the potential sale of the commodity for payment (Spratt, 2008). In Africa, this financing model was started by Bankers Trust Company, a US investment bank. At the inception of this model many international banks were not willing to assume new risk in relation to lending to African countries. The typical conventional finance available to trading firms in Africa was non-existent due to the difficult economic conditions at the time. This period witnessed international banks withdrawing and cancelling the clean credit lines to governments and local banks in Africa. This development had devastating effects on African economies, with the 1980s becoming the worst decade. The continent saw contraction in trade volumes and values during this period with the attendant consequence on domestic economies (Oramah, 2015).

In the midst of this tough economic condition, some innovative bankers realised the need for designing a financing arrangement that was rewarding and

at the same time had low risk. The bankers observed that despite the difficulties the countries were experiencing—low and volatile commodity prices, widening current account deficits, and declining economic growth—countries were still involved in active export of primary commodities in line with contractual terms. They also reckoned that these countries could benefit from trade finance provided it was possible to separate the risks associated with the trade and retaining/transferring those risks based on particular entities' ability in the export supply chain to assume those risks. Therefore, a means was devised to enable the banks retain the performance risk in trade finance on these exporters and transfer the payment risk to creditworthy traders or banks domiciled mainly in OECD countries. At the time, most of those involved were large government entities (commodity boards) that had the monopoly as commodity exporters (Oramah, 2015).

Structured trade finance enabled Bankers Trust to finance import of petroleum products to Tanzania, which was secured on cotton exports in the late 1980s/early 1990s. Prior to this time, Tanzania could not raise the finance for its oil imports since import lines of credit were cut following the debt crisis. Similar large, syndicated deals were done at the time to finance other countries, including Zimbabwe (which was secured on agricultural export receivables), Senegal (which was secured on groundnut export receivables), and Ghana (which was secured on cocoa export receivables). The financing arrangements were made either to state-owned commodity boards and companies or to central banks, which seemed to have worked quite well, re-igniting interest in financing African trade. The emergence of structured trade finance was useful as it allowed for the smooth financing of the transactions considering that these financing deals hinged on the performance ability of the commodity boards and payment capability of foreign buyers and/or their banks (Oramah, 2015). A number of reasons accounted for the state-owned exporting companies' strong performance ability. These are:

1. As state monopolies, they were the sole buyers of all export produce and this minimised the risk of the inability to source the produce;
2. Over the years, they had built solid logistics for exports, including warehouses, quality control, and transportation, thus, they did not require new investment in these areas;
3. The exporting arrangement enabled them to fix producer prices and fees for various logistics services. Therefore, domestic prices/costs were kept within their control, allowing them to negotiate sales contracts very early in the season; and
4. Given their size and capacity, they were also able to enter into forward sales contracts, thereby, minimising the impact of global price fluctuations on their operations.

These factors provided comfort to the international banks with respect to the performance risk of these state-owned companies. However, many

developing countries abolished their commodity boards and the local commodity marketing arrangements following pressure from the Bretton Woods institutions to liberalise and deregulate commodity sectors as part of their economic reform programmes in the late 1980s and early 1990s. A number of new companies evolved, but these did not have the size, the track record, and the monopoly status that the commodity boards had. This development worsened the financing challenges the countries experienced, leading to the design of new financing arrangement for these companies, contributing to the rapid growth of the structured trade finance concept. Subsequently, many international banks as well as local banks in Africa set up structured trade finance departments or units, signalling the widespread recognition of its significance (Oramah, 2015).

## 9.3 What Is Structured Trade Finance?

Structured trade finance, as defined by Giorgio (1998), encompasses any structure whereby certain assets (inventory, contract, export receivables, etc.) with predictable cash flows can be isolated from the originator, pledged (sold, leased etc.) and used to support the financing being raised (as collateral and source of reimbursement or repayment) or to substitute it. Structured trade finance is also defined as the art of transferring risks in financing trade and trade-related transactions from parties less able to bear those risks to those more equipped to bear them in a manner that ensures automatic reimbursement of advances from underlying transactions (Oramah, 2015). It is a form of debt finance, which structures trade finance for commodities across the supply chain. It is the type of debt finance where multiple finance products across the phases along the supply chain are structured in an integrated manner. Short-, medium-, and long-term financing packages are secured against inflows from the sale of the commodities (Mizuho, 2022). Structured trade finance allows for the isolation of certain risks and conversion of uncertainty to some certainty and makes the transaction being financed self-liquidating through ensuring automatic reimbursement from the underlying transaction. It ensures that the apparently unbankable trade deal is bankable (Oramah, 2015).

Structured trade finance is used for cross-border transactions as a strategy to encourage trade using a non-standard security. It is also commonly used across the sectors of producers, processors, traders, and consumers. Due to the nature of the economic activities and the related risks, several economic agents in developing economies do not have access to conventional lending. Compared to conventional financing, structured trade finance is more tailored to the needs of the assets or project being financed. The cash flows of the assets serve as the source of collateral.

Structured trade finance products tend to vary and extend across the supply chain, from purchase of raw material to delivery to customers, to facilitate production and trading activities. These include uncommitted trade facility,

inventory finance, accounts receivable financing, pre-export finance, countertrade, tolling financing, and borrowing base facilities (see Fanta et al., 2022).

- **Uncommitted trade facilities**: This is an agreement between a lender or supplier of funds and a borrower where the lender agrees to make short-term funding available to the borrower without clearly defined terms and conditions. It differs from other facilities as it does not involve stringent or specific terms and conditions. They also require no collateral, hence making them more expensive compared with other types of financing. It is mostly used as a source of temporary financing where the cash flows of the business are unable to fund its expenses and other commitment.
- **Inventory finance**: This is a short-term loan provided to finance the purchases of products to be sold at a future date. The products purchased serve as a form of collateral to the loan. Inventory finance could be used to finance the purchase of new inventory or to fund any other form of business expense in relation to production. It serves as a solution to short-term gaps in cash flow for businesses that have larger investment in inventory. It is also used to fund the creation of buffer stock in anticipation of a shortage or higher demand from customers based on market trends.
- **Accounts receivable financing**: This form of financing involves a borrowing firm entering into an agreement with a lender to obtain finance secured with its outstanding invoices of goods and services supplied to customers (receivables). The firm basically receives funding from the lender against the amounts due from its customers for outstanding invoices for goods and services supplied. This involves untying finance held up in outstanding invoices and the accounts receivable serve as assets that may be, at least, equal to the outstanding balances of the invoices. It may take the form of invoice discounting or factoring.
- **Pre-export finance**: This involves a finance provider advancing financing to an exporting firm based on the firm's proven orders from its consumers abroad. The firm or the borrower uses the funds to finance the production of goods for exports. Pre-export finance is used in situations where there is the requirement for a down payment for the production or commencement of a trade. This down payment is mostly required to commence the production process. Under this arrangement, the exporter uses the export contracts as collateral in securing the financing.
- **Countertrade/Barter system**: This is a reciprocal form of international trade where commodities are exchanged for other commodities other than foreign currency. This form of trade is common among developing countries with limited foreign exchange. Marin and Schnitzer (2002) suggest that although trading partners may settle their indebtedness using goods of inferior quality, enforcing payment in goods is easier compared with monetary payments.

- **Tolling financing**: This entails an agreement between two entities for the supply of a specified quantity of raw materials over a specified period. This enables the exporter secure raw material to facilitate production for exports. For instance, to strengthen the export supply chain process, a chocolate manufacturer may enter into a tolling agreement for the supply of cocoa beans or cocoa products from another entity to ensure consistent production by the chocolate manufacturer. Tolling financing is regarded an effective strategy for the working capital needs of an exporting firm.
- **Borrowing base facilities**: This is a form of trade financing or particularly a working capital facility, which is structured on the principle that the value of money a borrower can borrow is based on the value of a particular pool of assets the firm holds, which is known as the 'borrowing base'. This means the amount of credit provided will be based on the value of the firm's current assets (being cash, inventory, and receivables in most cases). Since a firm's pool of assets may vary over time, the credit will also vary in line with the value of the assets.

### *9.3.1 Typical Structured Trade Finance Deal*

Structured trade finance ensures that businesses have access to ready liquidity to finance their cross-border trade, even in the absence of immediate payment from their buyers. A typical structured trade finance deal involving commodity pre-financing includes three main parties, the exporter, the buyer, and the lending institution(s). It also has five stages as illustrated in Fig. 9.1, which presents a schematic of a typical commodity-based structured trade finance deal.

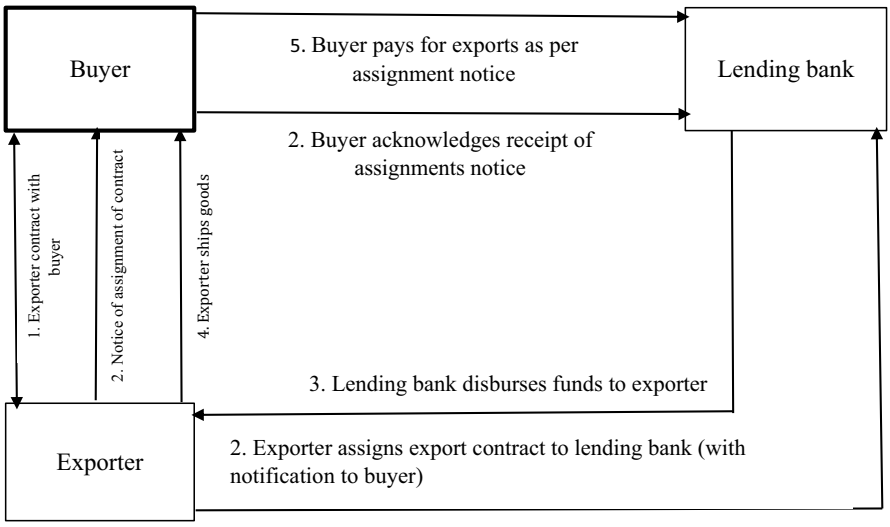
Buyer
5. Buyer pays for exports as per assignment notice
Lending bank
2. Buyer acknowledges receipt of assignments notice
1. Exporter contract with buyer
2. Notice of assignment of contract
4. Exporter ships goods
3. Lending bank disburses funds to exporter
Exporter
2. Exporter assigns export contract to lending bank (with notification to buyer)

**Fig. 9.1** Typical structured trade finance deal

1. First, the exporter and the buyer of the commodity in question design and agree to an export contract.
2. Next, the exporter gives notice of assignment of the export to the buyer and the buyer acknowledges receipt of the notice to the lender. The exporter proceeds to assign the export contract to the lender and notifies the buyer.
3. Thirdly, the lender releases funds to the exporter.
4. After receiving the financing, the fourth stage involves the exporter shipping the goods that form the subject matter of the export contract to the buyer.
5. At the final stage, the buyer makes payment of the goods to the lender in accordance with the notice of assignment.

## 9.4 Structured Trade Finance and Conventional Finance

Structured trade finance is an off-balance-sheet financial arrangement, designed to finance a specific trading asset or a pool of assets. It is seen as an effective approach to address the problem of credit worthiness, information asymmetry, and agency conflict and promote the sharing of risk between lenders and borrowers. Structured trade finance deals involve non-reliance on the balance sheet of the borrowing firm by raising funding to support the firm's investment activities at a cost that is independent of the holistic risk profile of the firm. The risk and rewards of the specific asset or investment in question determine the cost of capital and not the characteristics of the entire firm. In the case of conventional finance, the entire circumstances of the firm are brought into play in the pricing of loans to the firm. Conventional finance is more expensive and involves several procedures and assessments of the firm's ability to repay the credit based on their existing balance sheet and other relevant data. This is the core difference between conventional financing and structured trade finance.

In the case of conventional trade finance or unstructured trade finance, it is the firm that borrows and as such the entire assets of the firm stand to be liquidated to finance the loan in a situation where the firm defaults. This is different from structured trade finance as the loan is tied to the specific asset in question and more likely to be the collateral backing for the loan. Also, in structured trade finance, loans are issued across the various stages of the supply chain of a particular trading activity and as such financing is targeted to the needs of the client. In this regard, structured trade finance allows firms to finance the cycle of trade of a specific product while the loan is repaid at the completion of the production and export activities.

## 9.5 Structured Trade Finance Instruments

We discuss structured trade finance instruments, including supplier finance, forfaiting, factoring, securitisation, repurchase agreements, warehouse receipts, forward and futures contracts, and loan guarantees.

### 9.5.1 Supplier Finance

This is a working capital intervention provided to corporates that are willing to support their suppliers with convenient and cost-effective funding for receivables. It is also known as supply chain finance. In circumstances where access to finance is hampered by credit score, supplier finance is seen as the best alternative for corporate bodies to meet their working capital financing needs. The supplier issues an invoice to the buyer and the buyer confirms payment of the invoices. The lender then advances the total value of the invoices less the agreed fee as finance to the supplier. Supplier finance is therefore seen as the three-way collaboration finance between the lender, supplier, and the buyer. This makes it different from invoice finance, although the two seem similar. Supplier finance is an extension of the buyers' accounts payable and not a loan as it does not involve any financial debt, hence it does not impact the balance sheet (Grath, 2016).

### 9.5.2 Forfaiting

Forfaiting is a method of funding that permits exporters to collect immediate cash by the sale of their medium- and long-term trade receivables, which is the amount an importer owes the exporter, at a discounted price through a financial intermediary. This enables the exporter to eliminate or minimise the risk associated with the asset by making the sale without recourse. Willsher (1995) traces the origin of contemporary forfaiting services to the twentieth century while admitting that businesses had been discounting future cash flows long before that time. According to Lustig (1999), the financing technique of forfaiting came into being in Europe as a means of helping exporters to finance the sale of their commodities to the developing world. Lustig (1999) adds that forfaiting transactions account for about 5% of global trade annually. Even though forfaiting services are widely used in other continents, predominantly in North America, such financing techniques are yet to gain traction on the African continent. Out of the billions of dollars' worth of forfaiting transactions that occurred, the USA, Europe, and Japan account for 25%, 25%, and 19%, respectively, while all of Africa, Asia, Latin America, and Eastern Europe account for 25% (Whittaker, 2000).

### 9.5.3 Factoring

This is the process where a firm raises finance to support its working capital through the sale of its accounts receivables to the finance provider or a bank known as the 'factor'. Factoring allows exporting firms to sell their receivable balances for immediate cash (Soufani, 2002). The finance provider or factor also known as the lender will examine the quality of the risk of the receivables and decide on how much funds to lend. An important aspect of factoring is

that the factor takes over the account receivables management of the borrowing firm. Once the account receivables have been sold to the factoring company, this needs to be disclosed to the customers. That way, the customers are aware that the receivables have been purchased and as such they are obligated to make payments to the factoring company. The factoring company then sets up an account for the receipts.

There are other noteworthy characteristics of factoring. Due to the fact that factoring is not a debt facility, it is able to finance the working capital of a business without creating extra liabilities on the statement of financial position. The factoring company assumes the responsibility for accounts receivable management, including accounting and collection services, and provides liquidity support as well as protection against credit risk (Klapper, 2006). The decision by a factoring company to purchase the receivables of a business is influenced by a number of factors. These include the financial information, industry, nature of the clientele, the management team, and product portfolio of the business in question as well as the collectability of the outstanding invoices (Soufani, 2002). While remaining a marginal player, awareness about factoring has been gaining traction in Africa through Afreximank's leading efforts under a dedicated strategy that has been under implementation over a decade.

### *9.5.4 Securitisation*

Securitisation is the process of converting an illiquid asset or a collection of assets into marketable securities. It is the pooling of contractual debt such as mortgage loans, credit card debts and selling these with their related cash flows on the financial market. Cash flows collected from these underlying assets in the form of interest and principals are paid to investors. The resulting marketable securities are often known as asset-backed securities, because they are backed by the future cash flows receivable from the same assets from which the securities have been created (Hu, 2011). Asset-backed securities are attractive to a variety of investors, including investment banks, pension funds, mutual funds, commercial banks, hedge funds, and insurance companies. The practice of asset securitisation was first carried out by financial institutions that transformed home mortgage loans into mortgage-backed securities. Today, asset securitisation is done by a variety of financial institutions on a broad range of asset classes.

Frost (1997) asserts that asset securitisation offers businesses an alternative source of capital beyond the conventional markets for long-term financing, as it is touted as a way of reducing the overall cost of capital for businesses. Another benefit is that the pooling of assets into a special purpose vehicle during the securitisation process reduces the exposure of investors to risk as a result of the diversification effect of pooling. Lastly, because pooling makes the asset-backed securities identical to one another, they are much more liquid than the individual assets (Elul, 2005).

### 9.5.5 *Repurchase Agreements*

Repurchase agreement (repo) is the contract between two parties, where one party agrees to sell financial securities to another party at an agreed price with the commitment to buy back the securities at a future date at a specified price. The future price is mostly higher to compensate the investor for the risk associated with the security. The repo market is one of the biggest and most actively traded securities in the money market. It is an important source of liquidity to finance working capital of corporate institutions. The nature of repos is similar to that of secured lending transactions. In effect, a repo is a form of collateralised borrowing in which the borrower undertakes to provide the underlying securities as collateral (Lumpkin, 1987), as a way reducing credit risk. The repurchase price is usually fixed at the sum of the initial sale price and an agreed-upon rate of interest. In the case of a reverse repo transaction, securities are purchased and a commitment is simultaneously made to resell the same securities at a future date at a particular price. Even though there are repos of longer maturity periods, repos often mature overnight or in one business day (Bowsher, 1979). Repos are generally known for their low risk, high liquidity, variety of uses, and high flexibility in money markets.

### 9.5.6 *Warehouse Receipts*

Warehouse receipt is the kind of documentation used in the market for trading futures to guarantee the quality and quantity of a specific commodity that is being stored in an approved facility. However, the warehouse receipt system may be more complex through the inclusion of quality grading for commodities, warehouse ratings, and so on (Mahanta, 2012). The document communicates that the commodity is in the warehouse and the necessary documentation has been received. The warehouse receipt system offers a number of benefits to various stakeholders and market participants. First, it allows agricultural producers and businesses to convert their inventories of raw materials, work-in-progress or finished products into readily tradeable financial intruments (Lacroix & Varangis, 1996). In a regulated financial system, a warehouse receipt can be used as collateral for taking a credit facility (Miranda et al., 2019), thereby serving as a source of liquidity for meeting working capital needs. Moreover, the system helps to protect the income of producers and ensure food security by minimising post-harvest losses usually associated with the absence of ready market or storage facilities. Coulter and Onumah (2002) suggest that a regulated warehouse receipt system is a way of boosting agricultural marketing because the system curbs weighing-related cheating, controls seasonal price fluctuations, and facilitates access to funding, among others.

### 9.5.7 *Forward and Futures Contracts*

Forward contracts are customised contracts between two parties for the sale or purchase of a specified asset at a specified price on a specified future date. A forward contract can be used as a financial risk management strategy for speculation or hedging. Forward contracts are not standardised and as such are not traded on the stock exchange. They are traded over-the-counter, through networks of brokers and dealers. Futures, on the other hand, are standardised derivative financial contracts that obligate two parties to sell or buy an asset as a predetermined future price and date. Underlying assets to futures and forward contracts include financial instruments and physical commodities. The values of forwards and futures are determined by the changes in prices of the underlying assets. Forward and futures contracts can be of enormous benefit to businesses. They can be used by farmers for forward selling of their farm animals and crops, which helps farmers to secure market for perishable produce and to decrease the risk of selling their produce at below-cost prices.

### 9.5.8 *Loan Guarantees*

Loan guarantee is the promise by one party, known as the guarantor, to assume the payment obligations associated to a debt in the circumstance where the borrower defaults. This can be limited or unlimited, hence making the guarantor liable for only a portion or the whole debt. The need for guarantors is mostly common to new firms that mostly have less credibility and lower bank deposits to enable them access finance. Loan guarantee schemes are essentially regarded by policy makers as collateral substitutes provided to loan clients that are in need (Vogel and Adams, 1997). Generally, small- and medium-sized enterprises (SMEs) tend to have limited access to debt financing for their survival, operation, and expansion, mostly due to the lack of collateral security. To help address this challenge, governments and other stakeholders intervene to guarantee the loans that certain SMEs access from financial institutions. Governments may do so to support economic, social, or political priority areas. However, there are times when some beneficiary SMEs fail to meet their loan repayment obligations. Riding and Haines Jr (2001) argue that default rates vary widely across countries, across sectors, and based on the age of the business. They suggest that default rates could be reduced considerably by making small decreases in the level of loan guarantees.

Through loan guarantee programmes, start-ups and SMEs are offered the opportunity to build a credit history to enable them access funding on their own once the programme ends. According to Falagiarda et al. (2020), loan guarantee programmes reduce costs to lending institutions by passing on part of the resulting credit risk from those institutions to the governments that guarantee the credit facilities. Bradshaw (2002) also finds that loan guarantees increased employment figures in all beneficiary businesses and augmented tax proceeds.

## 9.6 Advantages/Benefits of Using Structured Trade Finance

Structured trade finance has been particularly beneficial to developing countries, where firms may not be able to access conventional finance (Spratt, 2008). It has, over the years, made useful contributions to businesses and economies across Africa. First, structured trade finance eliminates the strict collateral requirements of conventional lending. Banks usually require fixed properties from businesses and other borrowers as security for the credit facilities that banks extend to them. However, structured trade finance removes this bottleneck associated with conventional lending, by relying on the value and saleability of the commodities or assets in question. Loan guarantees even go further to remove the need for start-ups and SMEs to provide physical security to gain access to financing.

Another advantage of structured trade finance is that it serves as a useful tool for risk management for businesses and investors. As highlighted by Magdelinić (2013), the rapid revival of trade finance is hampered by credit risk so there has been an emphasis on techniques for credit risk management. With structured trade finance products, businesses are able to easily offload risky trade receivables, inventory and other assets to financial intermediaries in arm's length transactions. Klapper (2006) notes that factoring services may enable high-risk suppliers to pass on credit risk to 'high-quality buyers'. Loan guarantees also help businesses in this regard.

Structured trade finance improves intra-Africa trade, a key gap in the economic architecture of Africa, which needs to be bridged to achieve the economic and structural transformation of the African continent. The African continent accounts for only 3% of the world's Gross Domestic Product (GDP) and trade, even though it is home to 11% of the world's population (AfDB, 2017). According to Baker McKenzie (2022), access to trade finance is one of the factors accounting for the relatively low growth of Africa's trade in the last decade. Structured trade finance facilitates the smooth cross-border flow of goods and services with fewer financing bottlenecks. By providing key import and export financing, structured trade finance helps to increase the volume and value of intra-African trade and trade with the rest of the world.

Structured trade finance also provides much-needed liquidity to investors and businesses to finance their business operations and further investment. Factoring of trade receivables has been one of the reliable ways of generating operating cash flow for businesses, especially SMEs, by selling claims to trade receivables to factors. Also, asset securitisation unlocks and releases liquidity from illiquid assets for injection into businesses without adding to their debt stock. This is particularly crucial in recent economic times of high borrowing costs, as central banks continue to tighten monetary policy to curb mounting inflationary pressures.

Structured trade finance facilities are usually tailor-made. Specific funding needs of particular exporters, importers, businesses, and other borrowers are

used to design the financing deals. This allows borrowers to arrange bigger transactions than what conventional financing would allow and gives borrowers greater flexibility and scalability.

Furthermore, the customisability of structured trade finance is also harnessed for huge capital-intensive projects across Africa. According to Magdelinić (2013), there are no standardised types of transactions employing the trade finance structure, because the financing products can be tailored to meet the needs and prevailing conditions of various stakeholders. Using structured trade finance products, large amounts of funding, heavy machinery, and equipment as well as technical expertise are mobilised to undertake large, short- to medium-term contracts. Large projects, commodities, and capital goods usually form the subject matter of forfaiting transactions (Lustig, 1999). The financing of large projects such as hydro-electric dams, factories, and oil refineries, among others, has the potential to boost the mechanisation and industrialisation drive of the African continent.

Another advantage is minimal documentation. Unlike conventional finance, structured trade finance products usually have limited documentation requirements. For instance, forfaiting uses instruments such as letters of credit, bills of exchange, and promissory notes, which are simple in terms of documentation and easy to transfer legally (Lustig, 1999). The simplicity of the required paperwork adds to the ease with which businesses can take advantage of structured trade finance.

Moreover, a lot of structured trade finance is done on a non-recourse basis. Negotiable instruments such as bills of exchange, promissory notes, and letters of credit are discounted without recourse. This implies that financial intermediaries (such as factors) that purchase the negotiable instrument assume the risk of default and cannot take action against or seek reimbursement from defaulting parties. In contrast, conventional lending institutions do not usually enter such non-recourse transactions because transactions of that nature increase their risk exposure.

## 9.7 Challenges Associated with Structured Trade Finance

Structured trade finance is associated with a number of challenges and these include inappropriate for new businesses or new goods, limited stability of the political and macroeconomic environment, underdeveloped financial system, and low-income levels.

### *9.7.1 Inappropriate for New Businesses or New Goods—No History*

Structured trade finance is very challenging to new businesses and new goods due to limited or no history to build credibility. Investors are more likely to invest in projects that have viable future projections based on past performance.

New products that are still going through testing are less likely to be considered for investment as there may be limited verifiable performance track record to convince investors.

### *9.7.2 Limited Stability of the Political and Macroeconomic Environment*

The economy of Africa is seen as one of the most unstable markets, globally. This is due to series of political unrest, growing external and domestic debts, balance of trade deficits, and climatic factors. These instabilities significantly account for the lower growth and as such low investments. Though structured trade finance externalises or isolates credit and country risk, developing policies that seek to pursue stability on the African continent, would encourage high levels of investment and safeguard the climatic environment to support lives and businesses.

### *9.7.3 Underdeveloped Financial System*

In many African countries, financial systems are still in their developing stages. Some do not have the regulated securities markets such as stock exchanges that are required for trading some structured trade finance instruments. Another issue is that the use of forward contracts, warehouse receipts, futures, and other similar instruments is not as widespread as it is in the developed countries. Specialised financial services like factoring are also not common and the depth of non-banking financial institutions such as factoring, forfaiting, and export development and guarantee agencies are limited.

### *9.7.4 Low-Income Levels*

The continent of Africa is bedevilled with lower incomes following higher rates of unemployment, trade and balance of payment deficit, lower literacy rates, and underdeveloped industrial environment to add value to productivity. These have affected the development of the financial markets in terms of consistent supply of funds for investment. The continent in recent times has suffered from financial crises leading to the collapse of several financial institutions. These affect the ability of structural trade financing to thrive on the continent. The need to invest in human development is very key to ensure higher and stable income levels necessary for development.

## 9.8 Africa's Experience with Structured Trade Finance

Over the years, Africa continues to be the poorest continent in the world despite several interventions to address developmental challenges hindering the growth of the continent. According to the World Bank Africa poverty

report, although there is a decline in poverty across the continent, the population living in extreme poverty has grown significantly since 1990. Strategies to reduce poverty and improve the quality of life have been hindered by pandemics and global economic crises due to the institutional weaknesses in Africa. Trade is identified as a key stimulus in efforts to boost economic growth and reduce the levels of poverty but the African continent is yet to fully take advantage of the benefits of trade (AfDB, 2017). Empirically, there have been several suggestions to invest in infrastructures such as transport, water, ICT, and energy to set the continent on a growth path. There is also the need to enhance the development of the private sector as this is seen as one of the major sources of employment to the people of Africa. In order to develop the private sector, there is the need for an able financial sector. Inasmuch as developing the domestic financial market is important, there is also the need to seek foreign direct investment which is also seen as very key to growth.

Structured trade finance, which has emerged as a form of structured finance, mainly seeks to support international trade. Afreximbank is recognised as one of the key champions providing structured trade financial services to boost international trade. Currently the structured trade finance schemes run by the bank comprises programmes and facilities that are designed to address problems relating to product and market diversification facing Africa. The bank provides this form of finance to deal with the challenges of commodities trading that are already produced or near production to enhance their entry to the global market.

## 9.9 Preconditions for Enhancing the Use of Structured Trade Finance

In order to enhance the use of structured trade finance, a number of preconditions are necessary and these include developed financial system, developed legal framework, tax incentives, rating agencies and rating services, and political and macroeconomic stability.

### *9.9.1 Developed Financial System*

In order to ensure the success of structured trade finance in Africa, there is the need for a developed financial system that enhances easy access to information and efficient allocation of capital and investment. Effective corporate governance and risk management are also important to ensure the mobilisation of savings towards the facilitation of the trade of goods and services. Due to the time gap from the production to the sale of commodities and the risk associated with international trade, traders need to agree on the allocation of the related risk. The structured finance market seeks to provide an alternative means of financing that does not exist on the financial market. Financial markets in most African countries are dominated by banks that hinder the ability to mobilise long-term funding for international trade and supporting economic

activities in general. This is mainly because bank financing tends to have short-term maturities as they rely on deposits that have short-term maturities. The structured trade finance fills this gap by providing long-term financing through direct interaction with the investment community.

A developed financial market provides a strong backing to the innovation of efficient securitisation and structural trade finance transactions. It provides easy platform to connect buyers, suppliers, and borrowers on the financial market. It enhances institutional survival and growth, which is very critical to the supply of funds to boost economic activities.

### *9.9.2 Developed Legal Framework*

A strong legal system is very key in ensuring the protection of the rights of investors and users of funds as well as promoting effective risk management. Structural trade finance may require going beyond the scope of operation of just a single financial system and institution. Regulatory issues are identified as part of the causes of Africa's poor growth in trade compared to other major regions of the world (Baker McKenzie, 2022). In this regard, there is the need for strong regulatory systems to ensure the easy assessment of the risk associated with specific investments. Investors draw confidence from the effectiveness of the legal system in the resolution of conflicts and disputes as and when they occur. There is the need for an effective formulation and implementation of a legal framework and clear regulations in the organisation of structured trade finance transactions.

Lack of effective legal framework in African economies is due to low level of understanding and awareness of the nature or the complexity of structured trade finance transactions. The development of laws that are tailored to the requirement of each financial product demands clear understanding of the nature of the product and its related legalities. The participants of the financial market, including central bankers, institutional investors, and Securities and Exchange Commission (SEC), need to have a common understanding of the nature, returns, and risks associated with structured trade finance. The emergence of structural trade finance clearly requires the development of an effective legal framework for the financial system as the nature of transactions evolves with time as the needs of economic agents' change.

### *9.9.3 Tax Incentives*

The availability of tax incentives plays a vital role in firms' capital structure and financing decisions. Firms are more likely to resort to financing source that have a positive impact on tax payment and potential to reduce transaction costs. Investors are also likely to invest in sectors and projects that are likely to attract less tax on gains on their investment. Tax holidays and tax cuts entice financiers and sponsors to participate in transactions that have a higher economic significance. Levies imposed by governments increase transaction costs

as well as the cost of investments, thereby, discouraging a higher investment in a structured trade finance. There is therefore the need for African governments to create enabling environment for investments through tax incentives and lower levies.

### *9.9.4 Rating Agencies and Rating Services*

Rating agencies play an important role in vouching for the quality of structured assets in the selling of securities with the assets backing. Less experienced and sophisticated investors rely on the services of independent third-party rating agencies such as Moody's, Standard and Poor's, and Fitch, to assess the quality of the various structured assets available in their investment decisions. Additionally, there is the need for domestic rating agencies as they seem to have better appreciation of the local conditions and as such tailor their ratings to the needs and circumstances of the African market.

### *9.9.5 Political and Macroeconomic Stability*

A stable political and macroeconomic environment is very key to the growth and development of every financial market. Both domestic and external capital inflows will thrive in an environment of political and macroeconomic stability. It enhances investors' confidence and improves the supply of funds for investment. Investors are concerned about protecting their investment and making good returns on such investment. Governments need to ensure political and macroeconomic stability in order promote investments, including promoting structured trade finance, especially in the context of intra-African trade.

## 9.10 Conclusion and Implications

International trade has over the years been recognised to play a critical role in the growth and development of every economy, considering the unequal distribution of resources, geographically. Therefore, the ability to ensure successful trading activities across economies is very important, and financing has an important role to play in this regard. Structured trade finance is observed as an effective and efficient form of international trade financing in Africa, given the inability of conventional financing to address firms' financing needs on the continent. This chapter examined structured trade finance by discussing the types of structured trade finance products and the various structured trade finance instruments. It also examined the benefits of using structured trade finance and the associated challenges.

In order to enhance the use of structured trade financing in Africa, the chapter discussed the preconditions for doing this. These include a developed financial system to support the financing needs of businesses. There is also the need for institutional development and legal framework to provide direction and the resolution of conflicts to boost the confidence of investors in the economy.

Promoting a stable macroeconomic and political environment is also critical. Rating agencies and their services, especially the development of African rating agencies, are also seen as very needful to assess the credibility of assets in the consideration for financing. It is also important to have in place robust collateral management services and affordable insurance.

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CHAPTER 10

# Development Finance Institutions and Trade Promotion in Africa

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## 10.1 Introduction

It has been highlighted in the literature that trade is the lifeblood of the global economy. However, global trade has experienced heightened volatility in recent years, in response to the policies of major country stakeholders, geopolitical factors, and financial crises, among others. More recently, the COVID-19 pandemic triggered a drastic decline in global trade in 2020, on account of measures deployed to contain the pandemic. The lockdowns and workplace shift systems that were employed reduced output and restricted all forms of transportation, leading to supply chain disruptions that resulted in price hikes.

While global trade recovered markedly in 2021, even above the 2019 level (UNCTAD, 2022a), there were concerns that the war in Ukraine would contribute significantly to constraining sustained growth in trade in the medium term, which was the case. The war took a toll on food and non-food supplies, particularly because of Russia and Ukraine's significance to the global trade architecture. Hitherto, Russia and Ukraine were considered as the breadbasket of Europe, accounting for about 28 per cent of global wheat supplies, 18 per cent of global maize exports and 75 per cent of sunflower oil supplies, among others. Furthermore, Russia supplied 15–20 per cent of global inorganic

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_10

fertilisers and was the third largest producer and second largest exporter of crude oil before the war (EBID, 2022). Russia also accounted for about 40 per cent of the natural gas requirements of Europe.

The heightened supply-side disruptions during the early phase of the war led to an inflation spiral across the world. In an attempt to rein in inflation, central banks hiked interest rates, which inadvertently increased the cost of borrowing and production costs. In addition to the above, freight charges, which were hiked in 2021, remained elevated in 2022. The high freight charges as well as elevated food and energy prices conspired to keep global inflation doggedly high, repressing trade and leading to a deterioration in the cost of living for many.

To sum up, between 2020 and 2022 alone, global trade has, amongst others, been buffeted by factors such as:

- The COVID-19 pandemic;
- Elevated freight charges;
- The Russia-Ukraine war; and
- High borrowing costs, on account of monetary tightening in a bid to contain inflation.

Apart from the above trade inhibitors, there remains a lot of untapped trade potentials in many parts of the world for several reasons. For this reason, it is important to unlock these potentials and resolve the challenges to access to finance or financial arrangements that fit the profile of specific trade transactions on a timely basis, given that trade finance accounts for 80–90 per cent of global trade. The Asian Development Bank (Kim et al., 2021) estimated the global trade finance gap at US$1.5 trillion in 2019 and US$1.7 trillion in 2020, at the height of the COVID-19 pandemic. This gap can be plugged by tailor-made trade finance solutions to specific trade transactions.

There are various players in the area of trade facilitation. Apart from the parties involved (buyers and sellers), regulation is a key cog in trade facilitation. As already indicated, government policies have knowingly and/or unknowingly repressed trade over the years, through tariff and non-tariff barriers. These are mainly for their countries to gain an advantage over their competitors. In addition to regulators, the financial sector is quite a significant bloc in trade transactions. Whether the sector transfers owners' funds to suppliers, provide payment guarantees or provide direct lending or insurance, the sector's involvement in the process is quite significant.

Apart from commercial banks and insurance firms, development finance institutions (DFIs) and export-import (EXIM) banks are increasingly playing a pivotal role in the area of trade facilitation. While trade finance comes naturally to EXIM banks, in times past, DFIs focused on facilitating trade by providing hard and soft infrastructure, without necessarily lending directly to traders. That narrative has, however, changed with time. DFIs have taken a keen

interest in direct trade facilitation because of the need to address the lack of access to affordable and tailor-made finance by players in the industry.

This chapter looks into some of the ways by which DFIs have promoted trade over the years—instruments and direct interventions—while proposing ways of deepening this effort for the collective benefit of the society.

## 10.2 Overview of Development Finance Institutions

DFIs, as defined by Marbuah et al. (2022), are "a group of bilateral, regional, and multilateral financial institutions that specialise in investing in private sector firms with the aim to promote developmental impacts". DFIs focus on actualising developmental impacts in the areas they invest in. They are known to provide long-term financing to projects, compared to traditional lenders. They catalyse other sources of financing, given that other lenders become more comfortable lending to projects when they see notable involvement of DFIs.

DFIs have made outstanding impacts in various sectors of the global economy, and with their evolving business module, which is leading them into areas they had hitherto not considered, they will continue to make a significant impact on economies. Massa et al. (2016) accentuate the relevance of DFIs by establishing that DFI investments have significantly impacted economic growth, investment and labour productivity. They demonstrate this by establishing a positive relationship between DFI investments and all these three variables, as follows:

- a 10 per cent increase in DFI investments engenders a 1.3 per cent growth in the Gross Domestic Product (GDP) in lower income economies, while leading to a 0.9 per cent increase in higher income economies;
- DFI investments increase investment-to-GDP ratios by at least 1.5 per cent; and
- DFI investments lead to a minimum of 3 per cent improvement in labour productivity.

The definition by Marbuah et al. (2022) emphasises the developmental impacts of DFIs in the private sector, focusing on a general categorisation of DFIs. These developmental impacts encompass job creation, poverty alleviation and environmental sustainability, leading to economic growth and development. Lemma (2015) opines that DFIs' investments are meant to generate additionality and developmental impacts and to help attract conventional financial institutions to little known investment opportunities or sectors hitherto considered to be excessively risky. By additionality, DFIs invest in areas where conventional investors would not invest in because of risk profile considerations. Moreover, DFIs are concerned with sustainability issues (Dalberg, 2010), with the view to ensuring enduring impacts of projects, while maintaining environmental consciousness and reducing aid dependency.

In addition to the referenced categories of DFIs, there is also another category called state-owned DFIs, which are more inward-looking, with very little or no focus on countries other than those within which they are established. According to Yaron (2006), these kinds of DFIs are focused on providing financial support to underprivileged sectors of the economy, which commercial banks and other financial sector players shun because of the risks associated with their operations. Apart from taking sectoral risks by lending to particular state priority sectors, state-owned DFIs also lend at a longer tenor than typical lenders would, providing some convenient repayment schedule for their clientele. Examples of such DFIs are the Development Bank Ghana, Development Bank of Nigeria, among others, which draw on concessional state and donor resources to assume lending risks that commercial institutions would shy away from.

From the foregoing, DFIs typically prioritise development impacts and do not seek to compete with commercial banks in the local economy. In addition to private sector support, however, DFIs are also known to make interventions in the public sector space to stimulate private sector growth and to promote the provision of essential services. To this end, interventions by DFIs are both to the public sector, as an enabler of private sector growth and a provider of essential services, and also directly to the private sector.

While the definition for bilateral DFIs is quite straightforward, there exists a grey area when it comes to the definition of regional and multilateral DFIs. Bilateral DFIs are wholly or majority-owned by national governments, established to execute the country's development assistance programmes in other countries, typically emerging and developing economies. In effect, these institutions provide both public and private sector interventions in other countries apart from their own, with the aim to achieving specific developmental impacts in those countries. Examples of bilateral DFIs include the British International Investment, United States International Development Finance Corporation, Credit Institute for Reconstruction (KfW, Germany), the Development Bank of Austria (OeEB), Agence Française de Développement (AFD, France), Entrepreneurial Development Bank (FMO, Netherlands), Norfund (Norway), Compania Espanola de Financiacion del Desarrollo (COFIDES, Spain), and Development Bank of Southern Africa (DBSA, South Africa), among others.

Multilateral and regional development banks are used interchangeably in most cases. As the name suggests, they are established by two or more national governments, who become the only shareholders or majority shareholders, which shareholding structure is defined by an agreed articles of association or an underlying constitution. The World Bank Group is a typical multilateral DFI, given that it has a global scope and the mandate to achieve the global Sustainable Development Goals (SDGs). Beyond the World Bank Group, there are region based DFIs such as the African Development Bank, Asian Development Bank, European Investment Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, Islamic

Development Bank, Trade and Development Bank, and the ECOWAS Bank for Investment and Development, among others.

Apart from the World Bank Group, most of these multilateral DFIs have both regional and non-regional shareholders, with the regional shareholders being those found within their geographical scope of operations. These countries, which are usually the founding members, are also the ones that require development assistance. Non-regional shareholders, as the name suggests, are not located in the same geographical area as the regional members but find it necessary to become shareholders, so they can partly execute their overseas developmental assistance programmes in the region through the particular DFI. Their capital becomes a very useful resource for interventions in member countries on relatively concessional terms. Non-regional shareholders can be countries, multilateral agencies or private sector investors.

There are a myriad of reasons why emerging and developing countries as well as private project sponsors would want to have DFIs to finance their projects. Some of these are listed below:

### *10.2.1 Ability to Mobilise Additional Project Capital*

The presence of DFIs can help attract resources to a project because of their size, credibility and access to state authorities. Because DFIs are owned by governments, they tend to have more access to the fiscal authorities of their member states than the ordinary lender. This is because most DFIs have ministers for finance, economy, budget, regional integration or analogous portfolios service as members of their board of governors, with high-ranking public servants serving as board of directors. Thus, they are able to send their grievances across, making them appealing for private investors to enter into syndication with them.

Furthermore, the preferred creditor status that DFIs enjoy makes them appealing to private lenders. Yescombe (2014) argues that private sector players that co-finance some projects with DFIs at a certain category could enjoy the preferred credit status as well. In this sense, payments to such lenders will be prioritised over others, in case of limited debt service resources.

### *10.2.2 Additionality*

Private investors are averse to investments in certain countries and sectors. DFIs are more willing to venture into such areas that are considered risky by private sector lenders, so long as it aligns with their objectives.

### *10.2.3 Willingness to Stay the Course*

Dalberg (2010) posits that in periods of crisis, DFIs are more likely to stick to their investment programme than private sector investors, in spite of notable risks. This makes them appear to be more reliable than private sector investors.

### *10.2.4 Superior Credit Rating*

The presence of non-regional members with investor grade rating in the capital of DFIs makes it possible for such DFIs to achieve better credit ratings than most of their regional members. It is an indicator of strong shareholder support, given that such shareholders usually have the financial wherewithal to intervene to save the DFI when it finds itself in trouble. This superior credit rating allows DFIs to raise finance at relatively favourable terms than regional members, making it possible to lend to such members at below market terms.

### *10.2.5 Non-profit Mentality*

DFIs generally are not driven by profitability, as typical private sector lenders. Given their overarching objective of promoting development and reducing poverty, DFIs seek to optimise their developmental impact by providing financial mixes that drive down the cost of funds to levels that are below market rate. In effect, having a DFI on board can help reduce the project's overall funding costs.

### *10.2.6 Tenor*

Commercial lenders usually do not stay in a project for the long term. DFIs are usually patient investors that can advance debt beyond what the market offers, so long as they are convinced about the prospects of the project.

## 10.3 The Role of DFIs in Trade Promotion

Trade is an important sector in Africa's economic activity, accounting for about 50 per cent of the continent's GDP (IFC & WTO, 2022), even though intra-regional trade is still very low. The importance of trade in Africa's economic activity requires that this sector be increasingly supported by DFIs.

Region-wide trade promotion agendas are meant to address low intra-regional trade, particularly on the Africa continent, the lack of adequate trade-enabling infrastructure and widening financing gaps and expanding trade needs that have outpaced trade promotion intervention efforts. Trade promotion basically refers to the actions, interventions and policies that are essential to facilitating trade, with the aim of addressing or mitigating the bottlenecks to trade (particularly exports), including financial, structural, visible or invisible.

A lot of trade promoting strategies are undergirded by legislation to give them legal backing. While legislation is good, it must be emphasised that implementation of such legislation provides a test to whether such strategies will be successful or not. Interestingly, institutions and the people that are supposed to implement government policies become the problem. Hence, the need to capacitate institutions and personnel in order for trade promotion strategies to work effectively.

DFIs appreciate the role they can play to lessen the burden of trade participants, as a way of promoting economic growth and development through the growth in trade. The trade facilitation actions of DFIs in this direction have included technical and financial support towards the formulation of trade promotion policy, building the capacity of actors within the trade environment (both public and private), providing avenues for regional cooperation on trade, bringing attention to new trade opportunities and the provision of finance for the construction of trade-enabling infrastructure, among others.

On one hand, DFIs' public sector interventions are geared towards government effectiveness in trade. These are usually aimed at conscientizing state actors about the need to make policies and regulatory instruments sensitive to the needs of traders, harmonisation of customs and procedural regimes to shorten the time spent at the border, strategies for investment attraction as well as the provision of requisite infrastructure to fast-track the inspection of goods across borders. Capacity building for private sector participants, on the other hand, tends to include the provision of financial facilities that go to boost their working capital, helping them to expand market access, through product or service value addition, and assisting them to obtain compliance certification.

Specifically, DFIs have sponsored capacity building sessions to train trade negotiators, implementers of new trade promoting legislation and exporters. Such training sessions have affected customs officials, personnel of the immigration agencies, state trade promotion agencies and exporters, etc. For example, the Asian Development Bank (ADB), on one hand, has been assisting members of the Association of Southeast Asian Nations (ASEAN) with capacity building for customs officials. In 2014, for instance, ADB's assistance in this regard focused on exposing these officers to international best practices in customs administration, through regional knowledge-sharing and the use of partner knowledge institutions to introduce them to emerging trends in the field. In addition to this, the bank consulted the customs agencies and had site visits to various borders of some countries to identify knowledge gaps and to acquaint themselves with the idiosyncrasies of each one of those borders to guide future interventions.

The World Bank, on the other hand, kick-started a project in Armenia that aimed at making the government effective in its role in trade promotion. The project involved making the trade promotion machinery more effective, promoting investment and exports and modernising infrastructure to facilitate trade.

## 10.4 DFIs' Financing and Trade Promotion

DFIs' support towards trade promotion comes in the form of the provision of finance for the hard and soft infrastructure or through the provision of direct facilities to specific projects. The interventions come in four broad ways, and these are Debt; Equity; Guarantees; and Advisory services or technical assistance.

### *10.4.1 Debt*

A greater share of DFIs' interventions comes in the form of loans, spread over the short, medium or long term, depending on the nature of the project. This section discusses project finance and trade finance, which are some of the commonest debt instruments DFIs offer clients.

*Project Finance*

Hitherto, DFIs were focused on the provision of finance to develop trade-enabling infrastructure, with the aim to simplifying the process of trade. To this end, DFIs have extended facilities to finance projects such as port, airport, electricity, road, pipelines and telecommunication, among other projects. Furthermore, they have also extended facilities directly to manufacturing, mining, financial sector, small- and medium-scale enterprises and the like to prepare them adequately to export their commodities.

*Trade Finance*

Trade finance relates to the financial support lenders give in relation to trade-related transactions (Jones, 2018). The purpose of trade finance is to give financial support to the client, enabling them to procure or produce a good or service in order to meet pending orders from their clients. On the flip side, it also allows buyers or importers to pay for goods and services in a timely fashion. By so doing, trade finance helps to provide liquidity and risk mitigation (Chauffour & Farole, 2009) to any transaction.

DFIs provide facilities to promote trade, be it export or import. These facilities support the export of goods and/or services within or without the scope of operations of the DFI as well as imports from within and/or without the scope of operations of the DFI. The essence of trade finance is to provide the liquidity that makes it necessary for the buyer of the good or service to be able to pay for them on time. DFIs have various trade finance products, which they deploy, depending on the nature of transaction at hand or the needs of the client.

In most cases, DFIs facilitate trade through funded and non-funded instruments generally subdivided into short-term loans, guarantees and risk-sharing facilities. In times of uncertainty, such as those currently facing economies worldwide, continued access to trade finance is essential to keep businesses afloat and preserve jobs, particularly in emerging markets (IFC, 2022). According to IFC and WTO (2022) the share of trade covered by trade finance is estimated to be between 60 and 80 per cent globally, while this share is estimated to be 40 per cent in Africa. This level of trade support through trade finance in Africa shows the crucial role that DFIs play in promoting trade.

The most popular trade finance tool DFIs and other lenders use are letters of credit. Beyond this, standby credit and bank guarantees are used by various financial institutions.

A letter of credit is a binding agreement which ties a financial institution to the payment for a good and/or a service ordered by its client once it receives notification that the seller has delivered the said good of service. Letters of credit assure the seller that the goods or services will be paid for.

Another instrument of trade finance is asset-based lending. This product allows the borrower to secure loans granted by DFIs with an underlying asset—immovable property such as land or buildings as well as movable property such as accounts receivable or inventory. Some DFIs also lend to clients so they can acquire fixed assets such as factories, plots of land and buildings, which typically appreciate in value over time, with these assets being used as collateral for the loan.

Structured finance schemes involve financial products that are self-securing and self-liquidating, designed to, as much as possible, satisfy the idiosyncrasies of all parties involved in a transaction. Cherubini and Della Lunga (2007) posit that structured finance schemes are structured to satisfy the needs of investors and borrowers. Financiers consider structured finance schemes to be less risky because they are transparent and grants them control.

Another product DFIs offer to their clients is factoring. Factoring, which is a form of short-term trade financing, involves the seller of a good or service trading its accounts receivable with a third party (called a factor) at a discount, with the view to receiving liquidity for immediate needs. This allows the seller/exporter to stay afloat even if the period for the payment of the good or service has not fallen due.

### *10.4.2 Equity*

The Bank may make equity investments in a variety of forms depending on the investment vehicles. When the Bank takes an equity stake, it requires an appropriate return on its investment and a clear exit strategy (Black Sea Trade and Dev Bank).

### *10.4.3 Guarantees*

Another way DFIs promote trade is through the provision of guarantees. Such guarantees enable the client to cover payment obligations with their trading partners, with the partners having recourse to the guarantee(s) issued by the DFI in the event of default. In effect, the DFI indicates to the seller that its client is capable of making payment for the goods or service procured but in the event that they should default, the DFI will make the counter-party whole.

### *10.4.4 Advisory Services or Technical Assistance*

Given their footprint in many countries and different sectors, DFIs have built a great deal of experience in policy and financing strategies, which they have brought to bear to their clients overtime. They have shared country and sector experiences, what works and what does not, optimal deal structuring advice

and others with their clients, dwelling on their experiences in other countries and sectors. This makes them knowledgeable institutions clients can depend on.

Furthermore, their extensive connections enable them to pull resources, cash or logistical, to share knowledge with clients. They provide technical and capacity building assistance to these clients to prepare them for facilities or programmes they intend to roll out. For example, the training of customs officials on how they can improve their services to facilitate trade and the support for legislation in progress to harmonise customs legislations across regions are examples of such technical assistance DFIs provide.

## 10.5 Interventions of DFIs and the Structure of Trade Finance Playbook in Africa

There is arguably not much discussion on the importance of trade to the economies of countries, especially for African countries. Hui (2019) confirms this assertion by indicating that researchers have unanimously agreed that international trade improves the efficiency and welfare of trading partners. Africa's trade is characterised by a heavy reliance on exports of natural resources, such as oil, minerals and agricultural products. The continent also imports a significant amount of manufactured goods and machinery. China, the European Union and the United States are among the top trading partners for Africa. However, trade within the continent is relatively low, and efforts to increase regional trade and integration are ongoing. The African Continental Free Trade Area (AfCFTA) agreement, implemented in January 2021, aims to create a single market for goods and services across the continent and increase intra-African trade.

Trade promotion has generally been referred to as efforts to increase exports and attract foreign investment to a particular country or region. Globalisation has created unfettered conditions (Veinbergs & Skadina, 2021) and unlimited opportunities which contribute to accessing new markets to do business. However, there are immense challenges and an almost impossible situation for low experienced entrepreneurs who are replete in developing countries to gain a place in the international markets on their own. This is the reason why the state's support and even the AfCFTA becomes even more relevant. Aside the lack of state support, the dominant low level of diversity in the export resource wealth of African countries (Ross, 2019) must be addressed. The continent is currently the second least diversified after Oceania, creating the need to diversify in the continent. UNCTAD (2022) asserts that, "African Governments have recognised the importance of export diversification and embarked on different paths to diversify their export markets and transition into high productive economic sectors". This diversification is expected to be enhanced due to the influence of the growing middle class, the emerging consumer market, the increased use of financial services and technology and the performance of dynamic private entrepreneurs in Africa.

DFIs have made important trade finance interventions to promote trade in Africa—as discussed below.

### *10.5.1 Structure of EBRD's Trade Finance Offering*

The European Bank for Reconstruction and Development (EBRD) Trade Facilitation Programme was established in 1993 to promote trade through short-term facilities to provide liquidity (EBRD, 2021) and general guarantees to international confirming banks and trade-related cash advances. In 1999, the Programme was extended to a permanent framework facility of €100 million. In July 2020, the EBRD Board of Directors approved a new annual limit of €3 billion for the programme (EBRD, 2021).

Under the EBRD Trade Finance Programme, guarantees are provided to international commercial banks (confirming banks) thereby covering the political and commercial payment risk of transactions undertaken by issuing banks in the EBRD's countries of operations, which include Egypt, Morocco and Tunisia. EBRD's trade finance programme can guarantee any genuine trade transaction to, from and between the regions in which it operates. The various instruments issued or guaranteed by local banks that the EBRD can guarantee are the following: letters of credit and standby letters of credit; deferred payment and red-clause letters of credit; advance payment guarantees and bonds, and other payment guarantees; bills of exchange and trade-related promissory notes; bid and performance bonds and other contract guarantees; letters of credit with post-financing to cover finance of imported capital equipment; and other types of trade finance instruments can also be considered.

For trade-related cash advances, EBRD extends short-term loans to selected partner banks and factoring companies to fund trade-related advances to local companies for pre-shipment and post-shipment finance, as well as other financing necessary for the performance of foreign trade contracts and domestic and international factoring operations.

In 2016, the EBRD, based on its Green Economy Transition approach, initiated the Green Trade Facilitation Programme (Green TFP) which aims to enable partner banks to use their existing trade finance facilities to finance the export, import and local distribution of imported green technologies and materials to contribute to climate change adaptation and mitigation.

### *10.5.2 Structure of the IFC's Trade Finance Offering and Interventions*

The International Finance Corporation's (IFC) Global Trade Finance Programme (GTFP) was established in October 2005 with an initial portfolio of USD 500 million with the aim of expanding and complementing the capacity of banks to provide trade finance by mitigating risks in new or difficult markets where trade lines may be limited (Independent Evaluation Group, 2013; IFC, n.d.[1]).

[1] https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial+institutions/priorities/global+trade/gtfp

The programme offers confirming banks partial or full guarantees covering payment risk on banks in emerging markets for trade-related transactions (IFC, n.d.). These guarantees are transaction-specific and may be evidenced by a variety of underlying instruments such as letters of credit, trade-related promissory notes, accepted drafts, bills of exchange, guarantees, bid and performance bonds and advance payment guarantees (IFC, n.d.). In addition, IFC provides funding to banks for short-term pre-export financing.

The Global Trade Finance Programme supports issuing banks by providing access to a global network of confirming banks; facilitating transactions under limited trade lines; promoting competitive financing and responsive services; reducing cash collateral needs; offering technical assistance and offering an opportunity to build a relationship with IFC and with correspondent banks (IFC, n.d.).

For confirming banks, the Global Trade Finance Programme extends the geographical coverage for export finance; provides risk coverage for challenging trade transactions; offers competitive terms for export clients doing business in emerging markets; and builds correspondent bank relationships with new institutions on a low-risk basis.

The results of the first year of implementation of the programme showed that most of the requests were related to trade with sub-Saharan Africa, and more particularly with Nigeria. Sub-Saharan Africa accounted for 70 per cent of the guarantees issued by the programme in its first year of implementation and is a strategic priority for IFC (IFC, 2006). After four years of implementation, IFC's trade finance programme included 53 issuing banks as participants in 27 African countries, including Burundi, the Democratic Republic of Congo, Liberia and Sierra Leone. The programme had provided USD1.9 billion in guarantees for banks in Africa, supporting USD2.9 billion worth of trade in the region (IFC, 2009).

In 2022, 75 per cent of USD9.7 billion of IFC total commitment in trade finance was invested in low-income and fragile countries, the majority of which were African countries (IFC, 2022). In 2022, IFC, through its trade finance facilities, provided USD24 million and USD12 million, respectively, to Visita Banque Guinea and Burkina Faso. These interventions helped these banks to finance imports of foodstuffs, raw materials, refined oil products, equipment, consumer goods and other important items (IFC, 2022). In 2022, IFC began preparing a USD1 billion African Trade and Supply Chain Recovery Initiative to address trade and value chain financing needs across Africa following the COVID-19 pandemic (IFC, 2022).

### *10.5.3 Structure of AfDB's Trade Finance Offering and Interventions*

Before 2013, the AfDB intervened in the trade finance sector through trade finance lines of credit (TF LOCs), which were considered a variant of the Bank's standard long-term lines of credit. These TF LOCs were part of a trade

finance initiative designed to respond quickly to the liquidity shortage in African trade markets (AfDB, 2013). The TF LOCs had maturities of up to 3.5 years and were available to African financial institutions (commercial banks and development finance institutions) engaged in development finance operations (AfDB, 2013).

In February 2013, the AfDB initiated a new approach of trade finance in Africa through the Trade Finance Programme. The goal of the programme was to reduce the trade finance gap in Africa by "crowding in" global banks and strengthening African financial institutions that are critical to the promotion of trade (AfDB, 2014). The programme also seeks to promote regional integration and intra-African trade. This programme is an upgrade to the previous one, given that it provides risk mitigation solutions to financial institutions actively involved in trade finance in Africa, in addition to the provision of liquidity to the market that was previously offered by the AfDB. This programme has been structured into funded and unfunded products, including (1) Risk Participation Agreements (Guarantee); (2) Trade Finance Lines of Credit and (3) Soft Commodity Finance Facilities. The details of the programme's different products as presented in AfDB (2014) are provided below.

*Risk Participation Agreement*

The Risk Participation Agreement (RPA) is both a funded and a non-funded trade finance product that enables the AfDB to share risk with a select group of international and regional confirming banks, which provide documentary credit confirmation services to African issuing banks, with the objective of supporting and expanding trade in Africa. Under this product the AfDB shares trade finance credit risk (generally no more than 50 per cent of a trade transaction exposure) on a portfolio of eligible issuing AfDB trade transactions of partner confirming banks. RPAs operate on a portfolio basis and do not require the AfDB to sign direct agreements with the local issuing Banks.

*Trade Finance Lines of Credit*

The Trade Finance Line of Credit (TFLOC) is similar to the conventional line of credit offered by AfDB to local financial institutions, except that the TFLOC is used to finance exclusively trade-related transactions in AfDB regional member countries. TFLOC is used to finance trade transactions, which include among others, pre-shipment and post-shipment financing, capital expenditure, letters of credit discounting, factoring/forfaiting, import and export trade finance. Capital expenditure refers mainly to the purchase of machinery and plant/warehouse extensions that are directly related to growth in international trade business. These are capital investments used in the production of tradable goods.

Considering that most trade transactions have maturities of less than one year, the intermediary financial institutions would utilise the line of credit as a revolving credit facility to trade finance clients until the final maturity of the

TFLOC itself, which in any case will not exceed 3.5 years. The facility is available to local banks engaged in trade finance in Africa.

*Soft Commodity Finance Facility*

The Soft Commodity Finance Facility (SCFF) is a funded trade finance product that is used to mainly support the import and export of agricultural commodities and inputs across AfDB regional member countries. This includes, for instance, the provision of pre-export financing to commodity aggregators for the purchase and export of soft commodities. Commodity finance is usually structured and has credit protection in such forms as pledge of underlying commodity, assignment of proceeds, letters of credit and private or state guarantees. SCFF is provided directly to entities such as commodity aggregators, which are not necessarily financial institutions. These entities could include state-owned commodity boards or agricultural cooperatives that meet the eligibility criteria for AfDB private sector borrowing. Intermediaries such as commodity traders would not be direct counterparties of AfDB.

In 2020, the AfDB Board approved the introduction of a complementary trade finance guarantee instrument, called the Transaction Guarantee (TG). This complementary instrument is an unfunded trade finance guarantee instrument used by multilateral development banks on a single-transaction basis to cover up to 100 per cent of selected local banks' non-payment risk that international confirming banks are unwilling or unable to take because of the country or single-obligor risk (AfDB, 2021). AfDB approved the TG to allow the bank to support more local banks, especially in low-income and transition states, and through them, to support more local corporations and SMEs active in international trade in Africa.

In terms of interventions, AfDB provided a trade finance facility in 2021 through a €10 million line of credit to support Small- and Medium-Scale Enterprises in Mauritania (AfDB, 2022). This facility was aimed at helping SMEs in key sectors of Mauritania address their trade finance needs during the COVID-19 pandemic. In 2019, the AfDB's trade finance interventions were more oriented towards strengthening regional trade institutions and regional integration in Africa. Thus, a line of credit of over UA 170 million was granted to boost regional trade and trade finance (AfDB, 2020). This included a line of credit of UA 72 million to the Trade and Development Bank to establish the Common Market for Eastern and Southern Africa (COMESA) Regional Trade and Project Finance Support Facility, a funded trade finance and project finance facility, and an unfunded trade finance risk participation agreement. In the same year, a line of credit of UA 136 million was approved for technical assistance and capacity building to support African institutions to accelerate regional integration by enhancing capacity to implement the AfCFTA. Côte d'Ivoire's cocoa sector also benefited from a €100 million line of credit to support a pre-export and value chain trade finance facility to SUCDEN Côte d'Ivoire, to provide vital liquidity to at least 20 cooperatives with close to 18,000 farmers (AfDB, 2020).

In 2018, a USD12 million line of credit was provided by the AfDB to banks in Liberia to provide liquidity to small- and medium-sized enterprises in the country. The AfDB also signed an USD8 million risk participation agreement to enable local banks to confirm letters of credit issued by companies (AfDB, 2019). In 2017, AfDB's work in trade finance development focused on organising the East Africa Economic Opportunities Seminar in Nairobi to engage other financial institutions in supporting its trade finance programme. The seminar was attended by over 200 companies from East Africa (AfDB, 2018).

In 2015, AfDB approved a facility to support Standard Chartered Bank's (SCB) Risk Participation of UA 71.1 million, with the aim of increasing the capacity of SCB's risk participation agreement facility from USD 200 million to USD 300 million (AfDB, 2016). This facility is an unfunded risk-sharing agreement that requires AfDB to disburse funds only when there is a default on a guaranteed trade transaction. The increase in the facility's limit envisages enabling issuing banks on the continent to receive more trade finance support from the SCB. At the time, this was the largest risk participation agreement AfDB had ever signed with a confirming bank under its trade finance programme. The regional economic integration process received AfDB support in 2014 through a UA 180.7 million line of credit to the Afreximbank to cover lines of credit, trade finance and risk participation (AfDB, 2015).

### *10.5.4 Structure of TDB's Trade Finance Offering and Interventions*

The Trade and Development Bank's (TDB) intervention in trade finance is done through its short-term loan window, spanning a maximum of 3 years (TDB, 2023).

The products offered by TDB include import and export financing, structured commodity finance, pre- and post-shipment finance, issuance of LCs, guarantees and bonds, and supplier-focused working capital solutions, including receivables purchase financing and invoice discounting (TDB, 2023).

Over the past decade, TDB's gross trade finance loans to African countries have grown at an annual average of 20 per cent to a cumulative total of USD 25.4 billion. From a value of USD 870.2 million in 2012, TDB's trade finance loans to African countries reached USD 3.7 billion in 2021. However, 2018 remains the year in which TDB provided the most trade finance instruments to African countries at USD 3.9 billion (Fig. 10.1). TDB's footprint in trade finance in Africa has evolved markedly, moving from an intervention in 10 countries in 2012 to an intervention in 17 African countries in terms of annual gross loans provided in 2021.

TDB's trade finance interventions by country in Africa show that over the last decade, Zambia has received the most trade finance loans (Fig. 10.2). Zambia has accumulated a total of USD 6.3 billion in trade finance loans, followed by Sudan with a total of USD 5.3 billion.

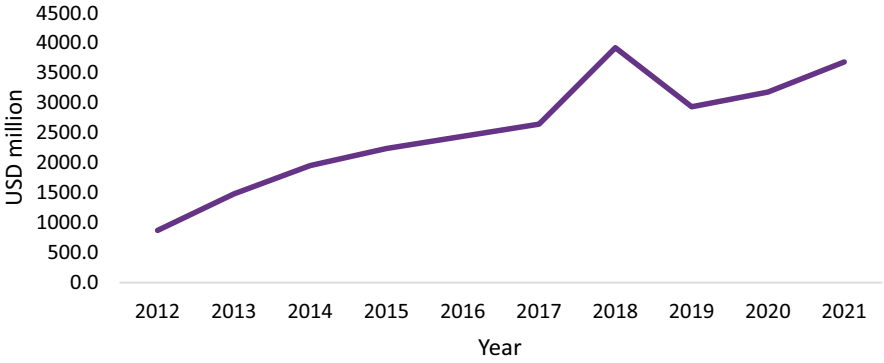


**Fig. 10.1** TDB gross trade finance loans (million USD) in African countries. (Source: Authors' computation based on TDB data)

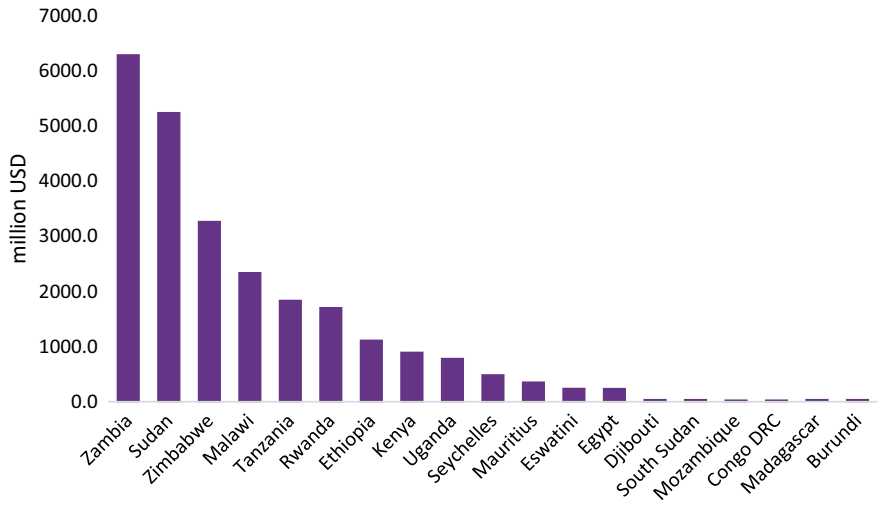


**Fig. 10.2** TDB's cumulative gross loans (million USD) for trade finance by country over the last decade. (Source: Authors' construction based on TDB data)

### *10.5.5 Structure of EBID's Trade Finance Offering and Interventions*

EBID's interventions in trade finance are carried out with the aim of creating market and finance trade flows (production, processing and trading of commodities) within ECOWAS Member States and their trade partners (i.e. regionally and internationally). The various trade finance services offered by EBID are as follows:

- Financing solutions: input finance, stock finance, export and import finance with or without processing of goods and financing through Bankers Acceptances;
- Providing fully collateralised short-term loans backed by underlying physical commodities;
- Financing the period between production or warehousing of commodity and delivery to the off-taker;
- Exercising complete custodianship over the value chain from production or warehousing to delivery; and
- Financing products to allow processing of commodities, where applicable.

Over the last decade, EBID's commitments in trade finance projects have amounted to USD 207.6 million. However, just after the financing of the rice import project in Liberia for an amount of USD 10.9 million in 2013, EBID was no longer involved in trade finance until 2020 when it resumed its interventions in trade finance by committing USD 20.9 million to two projects in Mali. This was a revolving credit for the import and sale of petroleum products and for the import of agricultural inputs. The bank became more involved in trade finance in 2021, intervening in six projects for an amount of USD 165.2 million, in line with its 2021–2025 Strategic Plan, which sought to capitalize on the increasing demand for this instrument (Fig. 10.3). These trade finance interventions were made through lines of credit for the import and delivery of fertilizers on the one hand and the import and supply of petroleum products on the other. In 2022, the bank extended a USD 10.6 million line of credit for the import and supply of petroleum products to Burkina Faso.

The analysis of EBID's trade finance interventions by country shows that Mali has benefited the most from the bank's trade finance interventions (Fig. 10.4).

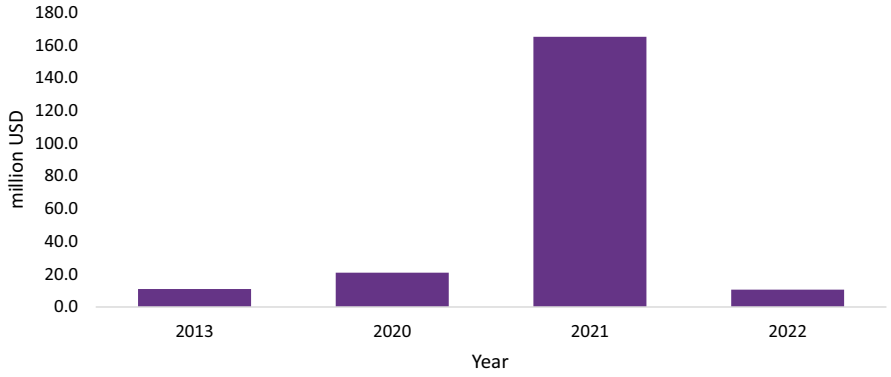


**Fig. 10.3** EBID's commitment in trade finance (million USD). (Source: Authors' construction based on EBID data)

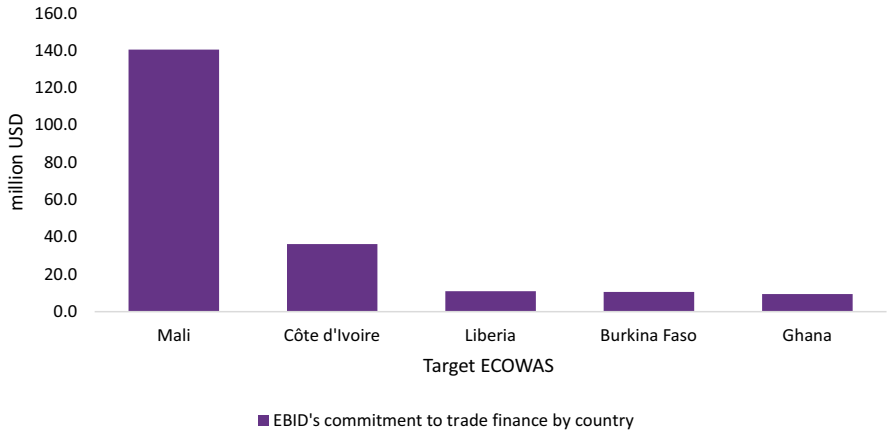


**Fig. 10.4** EBID's commitment to trade finance by country (million USD). (Source: Authors based on EBID data)

## 10.6 Conclusion

This chapter has focused on the role DFIs play in trade promotion. It sets out to explain the various categories of DFIs—bilateral, regional and multilateral—and the peculiarities that define them. While the identity of bilateral DFIs is straightforward, that of regional and multilateral DFIs can be a bit confusing. To put it simply, the World Bank seems to be the only truly multilateral DFI, given that it is the only DFI whose membership covers almost all countries and territories in the world. In effect, its mandate is global in nature. Regional DFIs are those that are established to cater to the developmental needs of the particular region for which they are established, even though they may have non-regional members in its capital.

DFIs have been at the centre of trade promotion since inception. However, for the most part, DFIs had been involved in the financing for interconnecting infrastructure development and indirect financing, rather than particular aspects of trade, like trade finance. Through the provision of debt, equity, grants and guarantees, DFIs have provided assistance for productivity enhancement for trade, hard infrastructure to facilitate trade and capacity building for both public and private sector players. Furthermore, DFIs have played a pivotal role in awareness creation concerning the barriers to trade by providing technical and advisory support to persons that matter in the trade value chain.

Over the past three decades, however, a lot of attention has been channelled towards trade finance, which has become necessary because of the trade financing gap, estimated at between US$1.5 and US$1.7 billion on annual basis. Together with financing hard infrastructure, such interventions are necessary to ensuring that the wheels of trade do not grind to a halt. DFIs provide longer term and relatively cheaper financing, which is essential to safeguard entrepreneurial interests and elicit continuous innovation.

DFIs have played a monumental role in the African continent. Arguably, DFIs' activities have been targeted towards the continent than to any other continent, given the developmental challenges that are prevalent in the continent. As enumerated above, DFIs such as the World Bank, African Development Bank, ECOWAS Bank for Investment and Development, among others, have advanced equity, debt, guarantees or grants to countries in the continent to undertake one promotion activity or the other. In addition, DFIs have provided technical support, leveraging on multi-country and multi-sectoral experiences, to clients, with the view to enhancing their operations.

Although the share of trade finance in trade promotion in Africa is low compared to other regions worldwide, it is clear that DFIs' interventions in trade finance, for example, have increased in recent years in Africa. But it would be even more beneficial if trade promotion could lead to the creation of jobs in Africa for the benefit of the teeming African youth. To achieve this goal, DFIs operating in the trade finance space should gradually shift focus from financing commodity export projects and imports of finished goods to financing projects that lead to value addition to commodities.

This would require that DFIs' trade finance interventions be integrated into industrialisation financing. With this, Africa will not only benefit from the jobs that will be created in the production sectors but also from the jobs that will be created in the trade sector. To increase the impact of trade on Africa's development, trade must be integrated into value chains as a backward integration to manufacturing, rather than one that is focused on the importation of finished products or the export of raw or semi-finished products.

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CHAPTER 11

# Payment and Settlement Systems and the African Continental Free Trade Area

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## 11.1 Introduction

The success of the African Continental Free Trade Area (AfCFTA) initiative is largely dependent on the existence of an effective and efficient payment system(s) on the continent. Effective and efficient payment system can facilitate the exchange of goods and services between countries on the African continent and the rest of the world. Payment systems arrangement[1] constitutes an integral part of the International Monetary System (IMS) (Satragno, 2022).

[1] "The rules governing the making of payments and transfers for international transactions between countries."

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_11

Historically, the IMS has been controlled or developed by the major economies of the Global North. Consequently, that most of the rules and frameworks are fashioned to serve the interest of developed nations and their multinationals. Because the Global North is the dominant player in international trade and finance, it is home to the institutions and infrastructures for exchange of goods and services across borders. These outcomes, among others, have afforded the North leverage and cost advantage regarding the transaction cost of international trade.

Africa's participation in cross-border exchange of goods and services can be enhanced if it builds a critical mass of the infrastructure needed for exchange of goods and services. Payment and settlement infrastructure is needed to facilitate the exchange of goods and services between countries. The four critical challenges of cross-border payments are cost, speed, access, and transparency (FSB, 2023). African-based payment systems that perform well on all four areas of importance for cross-border trade can impact the success of the AfCFTA in a significant way.

The architecture of payment system platforms can be examined on many fronts. Broadly, we can look at the platforms from geographical and market segment perspectives. Geographically, we have regional and global platforms as the two major platform types. And on market segmentation, we have platforms that serve wholesale and retail segments of the payment market. Payments infrastructure may be based on single-currency or multi-currency platform. Four out of the five regional payment system platforms in Africa are based on single-currency platforms. Until the introduction of the Pan-African Payment and Settlements System (PAPSS), there was no Africa-based multi-currency retail payment system.[2] Instructively, all the regional payment systems in Africa are designed to handle large-value payments. What has been missing, until the emergence of PAPSS, has been a payment system platform capable of handling large volume of low-value payments. PAPSS provides a platform for multi-currency payments system. An effective and efficient platform that accommodates large volume of low-value payments will certainly inure to the benefit of small businesses that seek to take advantage of the AfCFTA.

The purpose of this chapter is to examine the nature and structure of the regional payment platforms in as far as their role in trade facilitation is concerned. We also review the trends and binding constraints for effective and efficient payments across countries on the continent and offer policy suggestions to address the challenges.

[2] A retail payment system is one that allows the handling of large volume of low-value payments between system participants (e.g. Financial institutions) and end-users (i.e. consumers, etc.). On the contrary, wholesale payment platform is one that handles transactions between system participants. The payments here are high value with low volumes.

The rest of the chapter is structured as follows: Sect. 11.2 discusses payment systems in Africa and examines the nature and structure. Section 11.3 ascertains lessons from other markets. Section 11.4 identifies the binding constraints that impede synchronization or the adoption of a continent-wide platform. In Sect. 11.5 we examine the role of PAPSS in AfCFTA. Section 11.6 provides concluding remarks the way forward.

## 11.2 Payment Systems in Africa

The global payments architecture is complex and correspondent banking plays a pivotal role in the architecture, especially, for developing countries. Cross-border payments in Africa are to a large extent dependent on the system of correspondent banking[3] (Cooper et al., 2018a, b). However, the international banks that provide corresponding bank services are cutting back on the relationships and not keen to set up new ones. The reason for lack of enthusiasm for corresponding banking services is the risk of falling foul of regulatory and compliance demands associated with the *Know Your Client* (KYC) imperative. The other reasons for the reduced interests are the risk of attracting penalties and reputational damage due to a bad correspondent banking relationship. The big international banks also argue volumes of transactions do not justify the compliance costs incurred (BIS, 2020). Over the decade 2011 and 2020 correspondent banking relationships declined by 25%. In spite of the decline, the value and volume of transactions continue to grow, albeit modestly. This demonstrates further the importance of corresponding banking relationships in the global payments architecture.

AfCFTA aims to liberalize African markets and create a single market for goods and services. The free trade area initiative is expected to encourage trade within Africa and advance economic and industrial growth. Payments and the infrastructure that enables them will be essential for the exchange of value under AfCFTA. An important consideration is the fact that a successful and inclusive AfCFTA cannot afford to exclude small and medium enterprises (SMEs). And SMEs will likely generate large volumes of low-value cross-border payments. With cut-backs in correspondent banking relationships, there must be an alternative payment system to support cross-border trade in Africa. This is why an effective and efficient regional payments system or systems is so critical for the success of AfCFTA.

[3] "This is an arrangement under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payments and other services to those respondent banks" (BIS, 2020). Correspondent banking relationships allow respondent banks (mostly from different jurisdictions) access to financial services such as cross-border payments for their customers and thus facilitate international trade and financial inclusion (ibid).

### *11.2.1 Nature and Structure of Regional Payment Systems in Africa*

Review of the architecture of payments and settlement systems suggests until the introduction of PAPSS, there was no African-based multi-currency common platform for the exchange of value that covered the retail segment of the market (Table 11.1). The multilateral payment platforms operated by the regional blocs on the continent are targeted at the wholesale segment of the payments market. The two main types of regional platforms in Africa are the common platform and hub and spoke platforms. In the common platform, all the countries participating in the payment arrangement share a common platform hosted by a designated central bank or institution. The hub and spoke framework is based on structure that allows the synchronization of national platforms with a designated core platform, the hub (CPMI, 2023). The payment arrangements in West Africa, Central Africa, and Southern Africa are based on a common platform. The Eastern Africa Payment System (EAPS) and the Eastern and Southern Africa (REPSS) platforms are the hub and spoke kind (Table 11.1).

Payments within the AfCFTA entail, like all free trade areas, different factors and mechanisms. These include the real economy, channels, instruments, processing, clearing and settling, and supporting infrastructure. From the perspective of the real economy, the demand for payments and settlements will vary depending on the nature of the economy and society involved. For instance, cash transactions are predominant for less developed economies with considerable informal sectors. However, developed economies tend to have more large businesses and need modernized digital payments system. The channels for making payments may come in different forms including electronic transfers,

**Table 11.1** Multilateral platforms

| | *Market segment* | |
|---|---|---|
| *Geographical scope* | *Wholesale* | *Retail (including remittances)* |
| **Regional** | *Single currency, common platform*<br>• STAR-UEMOA (West Africa)<br>• SYGMA (Central Africa)<br>• SADC-RTGS (Southern Africa)<br>*Single currency, hub and spoke*<br>• REPSS (Eastern and Southern Africa)<br>*Multilateral, hub and spoke*<br>• EAPS (East Africa) | *Multi-currency, common platform*<br>• PAPSS |

Notes: The primary characteristics of each platform were used to categorize it. For example, platforms that are multi-currency per design, but only process one currency are categorized as single-currency platforms, while platforms that process wholesale and retail payments have been categorized based on their primary focus

Source: Di Iorio et al. (2024); Ahmady (2023)

cheques, cash, cards, and e-money. Usually, processing of payment orders involves the sending and receiving of digital messages for purposes such as authorization requests. In addition, the payment system involves clearing, settling, and the payment operations between different participants. Clearing is the transfer of transactional data that establishes the responsibilities of involved parties, while settling or settlement involves the actual exchange of value. Settlement can either be postponed (payments are cleared and settled later) or real time (payments are cleared and settled in the same transaction). In order to function appropriately, payment channels and instruments need a vital supporting infrastructure. While some channels require less infrastructure than others, most digital channels need electricity and Internet or some form of connectivity.

As regions integrate economically and promote free intra-regional trade, maintaining disparate national payment systems can increase friction to trade and serve as a barrier to the attainment of the objectives of the free trade area initiative. In the end, economic cooperation and development suffer. For instance, currently, payments for intra-African trade go through convoluted channels and typically involve a country outside the continent before reaching the beneficiary country. These inefficiencies hinder trade between African countries and increase the cost of funds transfer within the continent. This increases the cost of goods and services, thus reducing trade competitiveness of the businesses and countries involved. The high cost of funds transfer invariably increases the appeal of informal funds transfer arrangements with its attendant risk such as possibility of money laundering and terrorism financing. In view of the challenges associated with payments and settlements, many regional blocs have developed platforms to ease cross-border payments and settlements. Some of the regional blocs that have established payments and settlements infrastructure are the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA). The other blocs that have payments and settlements infrastructure are the Central African Economic and Monetary Community (CEMAC), East African Community (EAC), and West African Economic and Monetary Union (UEMOA[4]/WAEMU).

### (1) *West African Economic and Monetary Union, WAEMU*

The West African Economic and Monetary Union (WAEMU or UEMOA) is made of seven francophone and one Lusophone countries[5] in West Africa. The monetary union was created in 1962, in the same year, they created the central bank, Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). They then introduced a common currency. The currency is the West African

[4] The French acronym stands for Union Economique et Monetaire Ouest Africaine.

[5] The Francophone countries are Benin, Burkina Faso, Cote d'Ivoire, Mali, Niger, Senegal, and Togo. The Lusophone country in the group is Guinea Bissau.

franc. Over the past two decades, BCEAO has reformed and modernized its payment and settlement systems. It has also sought to enhance the growth of its interbank card payment system. BCEAO has created a reliable regional payment system that has been functioning smoothly. The integrated payment systems for its member states include the automated transfer and settlement system (STAR-UEMOA[6]) launched in 2004, automated interbank clearing system (SICA-UEMOA[7]) introduced in 2005, the WAEMU interbank card processing grouping (GIM-UEMOA[8]), and e-money. BCEAO also has a platform for payment transactions involving cash and public securities. This is known as the SAGETIL-UMOA[9] (BCEAO, 2019).

BCEAO uses the STAR-UEMOA platform as a centralized system for real-time gross settlement of major systemic transactions. It allows participants to connect, both directly and indirectly, via the Society for Worldwide Interbank Financial Telecommunications (SWIFT) or private BCEAO networks. The central bank allows settlement of accepted transactions in the common currency used in the region. The SICA-UEMOA is an automated exchange system for payment transactions that effectively controls how multilateral transactions are cleared. This is based on a decentralized architecture with eight national clearing systems and a regional clearing system for intra-WAEMU values. From exchanges until settlement, the system's processes are automated based on electronic evidence.

The major goal of BCEAO is to ensure financial stability in the region by encouraging effective, dependable, and secure payment systems that work for all participants in WAEMU. All payment systems, including electronic money transfer and payment systems, are included in the scope of monitoring by the central bank[10] (BCEAO, 2019). The strength of WAEMU's payment systems is largely due to the use of a common currency by the WAEMU member states. This provides a strong basis for monetary policy coordination and integration of financial infrastructures. This singular advantage speeds up settlements. However, the usage cost is deemed high because of the low level of financial inclusion in the region and the resultant low patronage of an otherwise great financial infrastructure (Cooper et al., 2018a, b).

Data on the distribution of outgoing commercial counterparty payment flows from the UEMOA/WAEMO suggest Africa accounts for 55% and 47% of the financial counterparty flows. The next important region that receives significant flows is the Europe-Eurozone area countries. The area receives 28% of the total commercial counterparty and 37% of the financial counterparty flows. Asia-Pacific gets 6% of the commercial counterparty flows. The Non-Eurozone area of Europe accounts for 5% and 3% of the commercial counterparty and financial counterparty flows. North America receives 5% and 13% of

[6] Automated Transfer and Settlement System in the West African Economic and Monetary Union.
[7] Automated Interbank Clearing System of the West African Economic and Monetary Union.
[8] Interbank Electronic Banking Group of the West African Economic and Monetary Union.
[9] Automated Cash and Public Securities Management System of the West African Union.
[10] Automated Cash and Public Securities Management System of the West African Union.

the outgoing payment flows for commercial and financial counterparties with the Middle East receiving 2% of the commercial counterparty flows (Calleart et al., 2018).

(2) *Economic and Monetary Community of Central Africa (CEMAC)*

CEMAC was founded in 1994 and it replaced the Customs and Economic Union of Central Africa (Union douanière et économique d'Afrique centrale, UDEAC, which was founded in 1964). CEMAC has six member countries.[11] The CEMAC countries created a single central bank, the *Banque des États de l'Afrique Centrale* (BEAC), headquartered at Yaoundé, Cameroun. The CEMAC countries then adopted a common currency, the *Cooperation financière en Afrique centrale* (CFA), in 1994. The creation of the common central bank and currency was aimed at facilitating intra-regional trade by reducing the cost of trade (Kangami & Akinkugbe, 2021).

BEAC introduced a real-time gross settlement system (SYGMA) and an automated clearing system (SYSTAC) to support bulk payments in country and across borders in the member states. While these platforms have been successful, the card transactions platform, the Interbank Card Payment System (SMI), has been less successful. This is, in part, due to the shallow nature of the financial markets in the region and the low level of financial inclusion (Cooper et al., 2018a, b). BEAC has also introduced an interbank switch to enhance interoperability for domestic card payments. There are also moves to create a real-time cross-border money transfer to bank accounts and mobile wallets in the CEMAC currency zone. Cross-border payments in the CEMAC countries are fraught with conflicts between the supranational and national regulatory bodies despite the existence of a common monetary authority and a common currency. The frictions between the various regulatory authorities impede harmonization efforts in the region. The weak oversight capacity and lack of adequate resources hinder the regulatory role of BEAC. This invariably works against harmonization of regulations.

More than a third (36%) of the outgoing commercial counterparty payments from BEAC go to countries in Africa, but Africa accounts for only 6% of the financial counterparty payment flows. Europe-Eurozone receives 34% and 46% of the commercial and financial counterparty payment flows. Seven percent (7%) and 37% of the commercial and financial counterparty payment flows go to North America. The figures for the Asia-Pacific region are 14% and 4%, respectively. Europe-Non-Eurozone receives 5% and 6% of the commercial and financial counterparty flows. The distribution of financial counterparties payment flows in Africa effected by CEMAC suggest 37% flows to CEMAC countries, another 37% to ECCAS countries, and 13% to ECOWAS-WAEMU countries. SADC region receives 6%, 4% for ECOWAS-WAMZ, and 3% ends up with the Maghreb countries (Calleart et al., 2018).

[11] Cameroon, Central Africa Republic, Congo, Gabon, Equatorial Guinea, and Chad.

### (3) *Southern African Development Cooperation (SADC)*

SADC comprises 16 countries.[12] The regional bloc initially had the objective of reducing economic reliance on then apartheid South Africa. After the end of apartheid, South Africa became a member and the focus of the organization changed to one aimed at fostering economic integration among member states. The other objectives are to work toward economic growth, economic development, peace, security, and poverty alleviation. Lastly, the regional bloc seeks to improve the quality of life of its citizens through regional integration.

The SADC member states inaugurated its real-time gross settlement system (SADC-RTGS) in July 2013. The regional bloc mandated the South African Reserve Bank (SARB) to run the platform on behalf of participating central banks. The membership of the platform is open to bank and non-banking financial institutions in the region authorized by their central banks. The SADC-RTGS, previously known as the SADC integrated regional electronic system (SIRESS), settles transactions between participating institutions in South African rands (ZAR). The payment and settlement system has a faster settlement time and reduces settlement risk all at a lower cost. Dominance of the rand is, in part, due to the quantum of FDI from South African corporations to the region and the fact that the country is a major trading partner for many of the countries in the region. The choice of the rand as a settlement currency in the region is largely because most South Africa is the dominant economy and the most important source of foreign direct investment in most countries in the region. Again, many leading South African companies operate in the region. They are found in banking, finance, retail, mining, etc. It is therefore not surprising that the use of the rand as a settlement currency in the region has increased over time (Cooper et al., 2018a, b).

In the 2017 financial year, 92% of the intra-Africa financial counterparty's payments were conducted within SADC, 3% with the East African Community countries, and 2% each with ECOWAS-WAMZ. The value of financial counterparties' transactions involving the remaining regional blocs was altogether 1%. North America received the largest financial counterparty flows (39%) from SADC-RTGS. Eurozone (23%), Africa (17%), Asia-Pacific, and Non-Eurozone Europe accounted for 9% each. For Latin America and Middle East, each region had 1% of the flows. Africa was the top destination for commercial counterparty flows (29%). Asia-Pacific comes second with 23%. The rest of the flows went to Europe-Eurozone (21%), Europe-Non-Euro (15), North America (9%), and 3% for Middle East. Only 1% went to Central and Latin America (Calleart et al., 2018).

[12] The member countries are Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, and Mozambique. The others are Namibia, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe.

### (4) *Common Market for Eastern and Southern Africa (COMESA)*

COMESA has 19 member states.[13] The group was formed in 1994 to replace the precursor, the Preferential Trade Area for Eastern and Southern Africa (PTA), which was established in 1981. COMESA's free trade area agreement came into effect on October 2000, even though a Customs Union was launched in 2009, it is yet to be active (Calleart et al., 2018).

The regional group set up its payment platform, the COMESA Regional Payment and Settlement System (REPSS), and this became operational in 2014. The objective of the platform is to ensure ease of cross-border payments within the COMESA region. The platform settles payments denominated in euro and the US dollar based on a multilateral system using net-of-day settlement regime based on either the euro or dollar. REPSS connects all of the cooperating central banks to conduct payments efficiently and affordably. Each member state's central bank assumes the position of direct participant to carry out financial transactions on behalf of commercial banks in its country.

Nearly a third (32%) of the outgoing commercial counterparty payments from REPSS are made to African countries. Asia receives 25%; Europe-Eurozone, 16%; Europe-Non-Eurozone gets 13%; and 9% for North America. However, the lion's share of the financial counterparty payment flows (54%) goes to North America, 18% to the Europe-Eurozone, and 13% to African countries. The share of the financial counterparty flows that Europe-Non-Eurozone countries receives is 8%, 6% for the Asia-Pacific region, and 2% for Middle Eastern countries (ibid.).

The distribution of payment flows to financial counterparties between COMESA and the rest of the continent shows that 66% of the flows end up in SADC countries with 19% to COMESA countries. The share of the flows that is accounted by EAC is 11% and 2% for the Magreb countries. The rest of the regional blocs in Africa receives less than 1% each (ibid.).

### (5) *East African Community (EAC)*

The East African Community (EAC) was first established in 1967, a decade later it was dissolved. A new EAC was established in July 2000 with its headquarters at Arusha, Tanzania. The EAC has seven member countries.[14] In 2014, it launched a payment system in Nairobi, the East African Payment System (EAPS): a cross-border system that allows transfer of funds across EAC member countries. The EAPS platform connects the Kenya Electronic Payment and Settlement System (KEPSS), Tanzania Interbank Settlement System

[13] The member states are Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe.

[14] Democratic Republic of the Congo, Burundi, Kenya, Rwanda, South Sudan, Uganda, and Tanzania.

(TISS), Uganda National Interbank Settlement (UNIS), and Rwanda Integrated Payment Processing System (RIPPS), as well as the RTGS system of Burundi. EAPS is a multi-currency system that uses currency of the partner states connected to the platform: Kenya Shilling, Tanzania Shilling, Uganda Shilling, Rwanda Franc, Burundi Franc (COMESA, n.d.).

The objective of the EAPS is to facilitate efficient and effective funds transfer system that will enhance the efficiency and safety of payments and settlements within the EAC region and provide a structure for the review of each regional payment system. Like other real-time gross settlement systems, EAPS provides users with many advantages, such as same-day settlement, real-time funds transfers, efficient and safe large-value payment transfers, and enhanced fund security. The platform uses SWIFT infrastructure to ensure finality and irrevocability of payments and increased accessibility.

In summary, the overarching objective of the regional payments system is to enhance financial integration efforts in the regions concerned and eventually spur on economic development. UEMOA/WAEMU, SYGMA, and the SADC-RTGS are single-currency wholesale systems with common platforms. On the other hand, the REPSS and EAPS are based on the hub and spoke framework. EAPS is a multi-currency platform that settles transactions in the local currencies of partner states connected to the platform but REPSS settles transactions in US dollars or euros. It is good to have regional platforms for cross-border payment and settlement, but these efforts must be seen as medium-term strategies that will culminate in a common integrated platform for payment, clearing, and settlement in Africa.

## 11.3 The Role of PAPSS in the AfCFTA

Intra-Africa trade reached a peak of US$193 billion after expanding by 18.6% in 2023 compared to the previous year's growth of 13.42%. But as a proportion of the continent's total trade, intra-regional trade represented 13.8% of total trade in 2022, a little lower than the 14.4% recorded in 2021 (Afreximbank, 2023). Intra-regional trade in Africa is very low compared with that of other regions of the world. The African Union's long-term development plan, Agenda 2063, recognizes the low level of intra-Africa trade and plan to assist in increasing intra-Africa trade to 50% of total trade by 2045. The AfCFTA agreement has a pivotal role in the attainment of the aspiration regarding the expansion of intra-Africa trade. The signing of the AfCFTA Agreement by more than 40 out of the 55 member states of the African Union in 2018 has a grand long-term plan of fostering trade integration among African Union member states. This is to create a wealthy and united Africa. In line with this, the Africa Export-Import Bank (Afreximbank) in partnership with the African Union and the AfCFTA Secretariat created a multi-currency common payments and settlements platform. The multi-currency common platform is called the Pan-African Payment and Settlement System (PAPSS). PAPSS was publicly launched on January 2022 in Accra, Ghana.

PAPSS uses a digital cloud-based platform technology for payments and settlements in furtherance of the objectives of AfCFTA to increase intra-African trade. The management and day-to-day operations of the PAPSS, which has its headquarters in Cairo, Egypt, are under the control of African Central Banks. Unlike other regional payments and settlements platforms on the continent, PAPSS is an inter-regional platform. It is, therefore, capable of executing cross-border payments and settlements in 42 African local currencies, with the help of central and commercial banks as settlement agents. PAPSS enables the rapid and safe payments between African countries by connecting banks, payment service providers, and other financial market intermediaries. Payments between two African currencies are often settled with a third currency, usually, a hard currency typically US dollars or euros. African businesses and their local banks relied on correspondent banks, frequently located outside of Africa. Individual African central banks had to meet foreign exchange and liquidity criteria under the prior arrangement.

PAPSS plays many important roles on the continent. These include (1) supporting the achievement of goals of the AfCFTA, through integration of the continent's cross-border payments infrastructure, (2) improving intra-African trade and investment flows as well as legalizing unaccounted trade and investment flows due to the presence of informal cross-border trade in Africa, (3) offering an alternative infrastructure for the existing, comparatively expensive, and lengthy correspondent banking relationships to promote trade and economic activity in Africa by lowering the cost of payment, clearing, and settlement, (4) reducing the length and variability of cross-border payments within Africa, (5) through efficient reporting and careful risk management provide central banks the means to keep track of cross-border payments. And to lower the cost of payments and eliminate liquidity needs of commercial banks for correspondent banking relationships.

PAPSS makes it possible to conduct cross-border financial transactions in local currency and in real time (Real-Time Gross Settlement), as well as to conduct end-of-day net settlement with participating central banks. Commercial banks, payment service providers, card schemes, and other middlemen can participate in the PAPSS, which serves as a common payment and settlement system for Africa. The system guarantees that payments will be received in less than a minute and that PAPSS will complete all necessary legal and regulatory checks in that period as well.

The PAPSS instant payment system (PIPTM), in addition to offering instant payments, offers Request to Pay (direct debit payment across borders, invoicing and billing), escrow services (keeping funds in safe custody until a transaction is completed), and intra-African remittance services. PIPTM also provides proxy addressing (processing payments by employing aliases and pseudo names) and sanctions screening (screening transactions against a list of terrorists or fraudulent acts).

Although PASS is in the developmental phase, it has the potential to provide a robust and well-regulated financial infrastructure to facilitate intra-regional

trade. And to do away with the need for third currencies for settlement, enhance firm liquidity management, and lower transaction costs. PAPSS has the potential to make significant contribution to Africa's aspirations for increased intra-continental trade by consolidating the fragmented payments, clearing, and settlement infrastructures on the continent. The initiative will bring considerable savings to the African countries. To this end, Afreximbank suggests, "prior to PAPSS, over 80 percent of African cross-border payment transactions originating from African banks had to be routed offshore for clearing and settlement using international banking relationships. That posed multiple challenges, ranging from payment delays to operational inefficiencies and compliance concerns for the disparate regional payment systems" (Afreximbank, 2022).

As of December 2023, ten African central banks have signed on with PAPSS. These are the central banks of Nigeria, Ghana, Gambia, Liberia, Guinea, and Sierra Leone, all in West Africa. The other countries that have joined the platform are Kenya, Djibouti, Zambia, and Zimbabwe, from East and Southern Africa. Hopefully, more central banks will join the platform in the coming years. There are also more than 50 leading commercial banks across the region that have partnered with the PAPSS platform thus far. This includes five of the leading multinational banks in Africa: Access Bank Group (Nigeria), Ecobank Group (Togo), KCB Group (Kenya), Standard Bank Group (South Africa), and the UBA Group (Nigeria).

## 11.4 Lessons from Elsewhere

The rapid adoption and development of payment and settlement systems via digital technologies have brought significant changes to international trade and economic development in Africa. As African countries embrace AfCFTA and digital transformation, there are invaluable lessons that can be learned from the experiences and developments in the payment systems of developed and developing economies. The notable lessons are associated with single-currency payment system, successful partnership between public institutions and private intermediaries, and the benefits of innovation and digital payment systems. African countries can harness the transformative power of AfCFTA and intra-African trade to lower the cost of payments and drive sustainable economic development by drawing on these lessons.

### (1) *Local Currency Payment System*

Payment and settlement systems are recognized as an important infrastructure for financial integration in the Association of South East Asian Nations (ASEAN) Economic Community Blueprint 2025. ASEAN is seeking to standardize and modernize payments infrastructure across South East Asia. The overarching objective is to facilitate interconnectedness in trade, investments, and free movement of people across the region. ASEAN countries have agreed to accelerate cross-border payments by using local currency transactions (LCT)

and the regional payment connectivity (RPC). Each central bank is committed to use its local currency in the ASEAN community for cross-border payments. Agreeing on the use of local currency for cross-border payment has been helpful in improving financial resilience. In the ASEAN region, this involves promoting the use of local currency to facilitate investment and trade across borders. In the long run, regional cooperation on cross-border payments can keep ASEAN's currency exchange rates more stable and independent of the US dollar. The regional economy will be strengthened globally as a result of more sustainable and integrated regional collaboration between nations (ASEAN, n.d.; Sina et al., 2021).

(2) *Partnerships*

Successful payment system based on digital technology and development of international trade has often been driven by collaboration and partnerships between governments, private sector entities, international organizations, and civil society. These collaborations facilitate knowledge sharing, capacity building, and the creation of enabling environments for payments and settlements of trade among regional blocs. Consultations and collaboration between a broad spectrum of stakeholders can provide useful inputs for improvement of the regulatory frameworks and to address perceived challenges. For instance, the US payment system is composed of a network of banks, central banks, securities companies, service providers, and company-owned utilities. This network of collaborators guarantees both timely settlement of securities transactions and seamless transmission of funds for commercial and financial activities.

The collaborative effort of the Single Euro Payment Area (SEPA) in Europe is another example of how regional collaborative initiative countries can assist in providing an efficient and effective payment, clearing, and system to facilitate trade and commerce. To expedite adoption of a common or uniform payment systems, rules, and standards, the euro public sector steered the transformation effort. It assisted in bridging the gap between local payment markets, offered a uniform legislative framework, and ensured prompt development. SEPA's ability to rely on a powerful coalition of private market participants that brought all PSPs together under a common vision was equally important to its success.

(3) *Benefits of Innovation and Digital Payment Systems*

The promotion of innovation and efficiency by regional payment systems has played a significant role across regions. Ensuring digital inclusion for all segments of society is vital for leveraging the benefits of AfCFTA. Digital payment systems are critical for facilitating intra-regional trade. The experiences in the global front highlight the benefits of innovations and the importance of promoting secure and convenient digital payment platforms, to overcome the challenges of promoting AfCFTA. For instance, the creation of pan-European

market infrastructures has contributed to providing digital payment solutions and instant settlement. In addition, the SEPA immediate credit transfers (SCT Inst) mechanism is helping to modernize the European payment system. Additionally, the TARGET Instant Payment Settlement (TIPS) program of the Eurosystem allows for pan-European reachability and prompt settlement of payments. For this reason, banks and other payment intermediaries are now able to meet the demands of clients for immediate cross-border settlement and transaction. Thus, enabling seamless, reliable, and affordable digital payment solutions encourages participation in intra-regional trade and expands economic opportunities.

## 11.5 Binding Constraints for Synchronization of Payment Systems

Imagine an African continent where trade is unrestricted by complex, frequently expensive customs procedures and taxes and where products and services can be freely exchanged between nations and regional blocs. To realize this dream, we would need an efficient payment and settlement system to promote an integrated ecosystem. Discussions about the future of the African financial market infrastructures (FMI) supporting international trade payments and settlement have been invigorated following the introduction of digital payment technologies. This has led to the involvement of various organizations from many jurisdictions in cross-border payments activities. Cross-border payments are sometimes costly and slower than domestic payments. In particular, synchronization of payment systems is frequently hampered by the absence of universal communication systems. Africa has interoperability challenges. There are also adoption and connectivity barriers. The other short comings include weak infrastructure, regulatory compliance, lack of consumer confidence, and security risks. Lastly, cross-border trade barriers, market fragmentation create challenges for scaling up operations.

(1) *Interoperability*

To create a seamless digitalized payment and settlement system for trade requires collaboration between many stakeholders and role players across countries. The critical stakeholders include central banks, commercial banks, development financial institutions, international financial institutions, and payment service providers (PSPs). Creating a unified payment system for the exchange of financial information between parties from different jurisdiction can be an arduous task. Interoperability requires exchange of financial information between applications, databases, and end-users. This allows multiple payment schemes or networks to initiate and complete financial transactions. It allows business to transact outside the network created by their own financial service providers. Given that most countries and financial institutions have different

standards, procedures, and regulations for payments and settlement, interoperability becomes very complex. The multiplicity of standard procedures for regulations also restricts synchronization. In some cases financial service providers rely on manual document processes, making financial information management complex and time-consuming—creating challenges with interoperability and synchronization of the system. To facilitate the smooth operation of the AfCFTA and to boost intra-African trade, barriers that hinder interoperability of the payment and settlement systems need to be addressed. The use of comparable cutting edge technologies will facilitate synchronization. For example, before the synchronization of payments systems in the Eurozone area, jurisdictions were required to adopt real-time gross settlement (RTGS) platforms for national payments and settlements. Indeed, most countries have opted to adopt RTGS because of its technological superiority (SWIFT, 2014).

(2) *Adoption and Connectivity Barriers*

While many digital infrastructure companies are adopting payment digitalization, the technology is still relatively new. Given that the system's synchronization is entirely digital, it is necessary to invest in a reliable Internet connectivity infrastructure and dependable hardware to guarantee a smooth payment and settlement process. Business adoption of payment digitization requires a certain minimum level of technology literacy. Access to affordable and reliable Internet connectivity remains a major challenge in many parts of Africa. The digital divide between urban and rural areas, as well as across different countries, inhibits the widespread adoption of synchronized payment and settlement systems.

Inadequate physical infrastructure in areas such as broadband networks and electricity supply further exacerbates the problem of poor interconnectivity, making it difficult to operate a common payment platform (Lukonga, 2018). A significant portion of the African population lacks adequate digital skills and literacy. Limited awareness and understanding of payment and settlement systems and digital trade processes hinder the adoption and utilization of digital technologies. AfCFTA member countries can harness the benefits of the free trade area agreement by promoting digital literacy initiatives. This can be done by providing training programs, and enhancing educational curricula to incorporate digital skills can be a crucial step toward empowering individuals and businesses to leverage payment and settlement systems opportunities effectively.

(3) *Infrastructure Requirements and Regulatory Compliance*

Infrastructure is necessary for successful implementation of digital payment and settlement system. The ICT infrastructure system that links banks and other financial institutions engaged cross-border banking intermediation is poor. This makes clearing and payment confirmation very challenging in Africa. Start-ups and SMEs lack the capital needed for setting up digital payment and

settlement systems for their online storefronts. Payment service providers (PSPs) often charge large setup fees and monthly fees, which may be out of reach for smaller businesses. Parties must abide by legal and financial requirements in order to process digital payments and synchronize payment and settlement systems. The parties might have to obtain a license for payment processing or adhere to particular laws and standards depending on the nation. A successful implementation of a robust infrastructure and integrated regulatory framework as required by the AfCFTA Agreement could help foster the synchronization of the payment and settlement system and trade openness in the region.

(4) *Consumer Confidence and Security Risk*

Building trust and consumer confidence in digital transactions is crucial for the growth of payment and settlement ecosystem. In Africa, concerns about online security, fraudulent activities, and unreliable delivery services are prevalent. Experts (Vasek & Moore, 2015) argue that many potential customers are skeptical about sharing personal and financial information online, limiting the willingness to engage in payment and settlement synchronization activities. Addressing these concerns by an AfCFTA protocol that highlights the need for robust cybersecurity measures, secure payment gateways, and transparent delivery systems is essential. When not implemented correctly, synchronization of payment and settlement systems might leave clients' transactions open to fraud and cyberattack—which may hinder the preparedness of AfCFTA in achieving their goals. Data breaches, identity theft, and phishing assaults could result, potentially resulting in significant losses for intra-African trade.

(5) *Inadequate Payment Systems and Cross-Border Trade Barriers*

In many African countries, traditional banking services are not easily accessible to a significant portion of the population, particularly those in rural areas. Lack of financial inclusion poses challenges for synchronization of payment and settlement systems, as online transactions rely heavily on digital payment systems. Integrating alternative payment methods, such as innovative Fintech solutions, can help bridge this gap and encourage wider participation in digital intra-regional trade. African countries often have contrasting and diverse regulatory frameworks, trade policies, and customs procedures. The incongruous policies and procedures, etc., complicate cross-border payment and settlements, making it challenging for businesses to expand beyond their home countries. Harmonizing trade regulations, simplifying customs procedures, and promoting regional integration initiatives proposed under the AfCFTA Agreement can unlock the full potential of the payment and settlement systems in Africa.

(6) *Market Fragmentation and Scalability*

African markets are diverse and fragmented, with varying consumer preferences, languages, and cultural nuances. Adapting and localizing products, services, and marketing strategies to cater to different markets can be resource-intensive and challenging. Moreover, scaling up operations beyond local markets can be complex due to logistical constraints, regulatory differences, and competitive landscapes. Building scalable business models, embracing technology-driven market research, and fostering strategic partnerships can help overcome these challenges. Despite these challenges, it is important to recognize that Africa presents immense opportunities for payment and settlement systems through the AfCFTA. Addressing these obstacles requires concerted efforts from governments, private sector players, international organizations, and stakeholders at various levels. By investing in infrastructure development, policy reforms, skills training, and cross-border collaborations, Africa can unlock its digital potential and pave the way for inclusive and sustainable economic growth.

## 11.6 Conclusions and Way Forward

Payment and settlement systems constitute a critical fulcrum around which economic agents conduct trade and finance safely and efficiently. Therefore, a synchronized, efficient, and effective payment and settlement system has the potential to revolutionize intra-African trade by opening up new opportunities job creation, innovation, and economic growth.

While there are significant challenges to overcome, African financial development institutions, including the Afreximbank and the AfCFTA, are increasingly recognizing the transformative power of PAPSS and digital technology and are actively working toward harnessing its benefits. By investing in digital infrastructure that promotes effectiveness and efficiency in payments and settlements African nations can unlock the full potential of AfCFTA. Embracing a synchronized payment and settlement system can streamline trade processes, through digitalization, and will enable businesses to participate in regional and global value chains. It can also facilitate access to financial services, promote financial inclusion, and enhance cross-border trade.

Regional integration initiatives, such as the AfCFTA, provide a framework for harmonizing trade policies, reducing barriers, and facilitating trade across borders. Collaborative efforts among African countries, supported by public-private partnerships, can foster innovation and create an enabling environment for the use of payment and settlement systems and trade to thrive. Furthermore, payment and settlement systems can empower SMEs by providing them with access to global markets, digital payment systems, and supply chain optimization tools. This, in turn, has the potential to drive intra-African trade, enhance competitiveness, uplift communities, generate employment opportunities, and drive inclusive finance and foster sustainable growth and development.

Efforts should be made to create universal communication systems and to address interoperability problems. African countries must reduce barriers to connectivity, address infrastructure weaknesses, and ensure strict compliance to applicable regulatory regimes to reduce security risk. Governments and domestic trade bodies must build consumer confidence. Stakeholders must reduce market fragmentation and create conditions for scalability. By providing equal access to unified payment and settlement system, countries can empower individuals and businesses to participate fully in the AfCFTA.

Africa's unique mobile revolution has played a significant role in expanding digital technologies and trade. Lessons learned from Africa's mobile success demonstrate the potential for leapfrogging traditional infrastructure limitations. Mobile technologies can facilitate access to the payment and settlement system, enable mobile payments, and provide platforms for digital intra-trade. Leveraging mobile technology and embracing innovative mobile-based solutions can drive the PAPSS.

SMEs are the backbone of many African economies. A common platform for payment and settlement and integrated trade framework (AfCFTA) will provide opportunities for SMEs to access markets, expand their reach, and enhance competitiveness. Providing an enabling environment for SMEs to leverage digital payment and settlement systems can drive cross-border trade within and across regions.

African countries are recognizing the importance of harmonizing trade policies and regulatory frameworks to facilitate cross-border trade. Lessons learned emphasize the need for Governments and relevant stakeholders to collaborate in the effort to align trade policies, streamline customs procedures, and create a single-currency payment and settlement system. The need to reduce trade barriers, promotion of interoperability, and simplification of cross-border trade rules and regulations cannot be emphasized enough to unlock the full potential of AfCFTA.

African countries have demonstrated resilience and adaptability in leveraging payment and settlement systems for trade. They have embraced innovative solutions to overcome challenges, such as limited infrastructure and connectivity. The ability to adapt and innovate is crucial in navigating the evolving payment and settlement landscape, and African countries can continue to learn from developed and developing market experiences and seek innovative approaches to address future challenges.

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CHAPTER 12

# Central Bank Digital Currencies and Cross-Border Payments in Southern Africa

*Vivienne A. Lawack and Sia A. Mziray*

## 12.1 Introduction

The liberalisation of cross-border movement of individuals in Africa has led to a surge in intra-African trade. This enhanced the speed and potential for the exchange of goods and services. In 2021, the value of intra-African trade was estimated to be US$71 billion, representing 14% of Africa's total exports to the rest of the world.[1] Between 2020 and 2021, there was a 7% increase in intra-African trade and a 32% increase in Africa's exports to the world.[2] In addition, trade has emerged as one of the key factors driving integration across the African continent.[3] The recent establishment of the African Continental Free Trade Area is argued to be the catalyst in driving integration between African nations and intra-African trade.[4] These developments have made it imperative

[1] Tralac 9th edition (2022a, p. 14).
[2] Ibid.
[3] Aza Finance, *An overview of African trade development and statistics.*
[4] UNCTAD Implications of the African Continental Free Trade Area for Trade and Biodiversity: Policy and Regulatory Recommendations (2021, p. 1), see Echandi et al. (2022, p. 8), Green et al. (2019, p. 3).

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_12

to reconsider the existing regime for cross-border payment in Africa, to consider if they remain adequate for dealing with modern realities or need to be adapted.

Historically, intermediaries located in the Western world, for example, North America and Europe, have facilitated cross-border payments in Africa, but this has resulted in complexities, added expenses and other inefficiencies. Nevertheless, continental hosting is becoming increasingly popular. For example, cross-border wire transfers between two African banks and their processing have been facilitated by subregional payment systems such as the Southern African Development Community Real-Time Gross Settlement (SADC-RTGS)[5] system and the more recent regional payment system, the PAPSS.[6] Even though these payment systems have been introduced, they are not short of challenges and also have their limitations. Therefore, there is still a need to explore other cross-border payment solutions that are secure, accessible, affordable and capable of adapting to technological advancements (such as CBDCs) in the payment industry.

It is against this context that the study makes a case for the adoption of CBDC by the SADC region under its regional RTGS system to enhance the efficiency and effectiveness of the system. The chapter begins by examining South Africa's National Payment System (NPS), given that the country is a key member of the SADC region and has played an important role in the development and implementation of the SADC-RTGS. Among other objectives, this discussion is useful for highlighting certain qualities that the NPS of countries aiming to adopt CBDCs should have. It also discusses the models adopted in cross-border payments (including the model that SADC-RTGS follows) and the challenges associated with the model. Furthermore, the chapter explores the prospects and considerations for adopting CBDCs for cross-border payment under the SADC-RTGS. Ultimately, the chapter provides an assessment and suggestions for improving cross-border payment to facilitate intra-African trade.

## 12.2 Understanding the National Payment System (NPS) in South Africa

This section provides an overview of the NPS in South Africa. South Africa is the leading intra-African exporter and importer, responsible for 37% of exports and 14% of imports in the continent.[7] It is therefore imperative to discuss the national payment system in the country considering that both the NPS and SADC-RTGS use similar payment infrastructure to enable real-time payment transactions.

[5] South African Reserve Bank (SARB) 'Regional Settlement Services'.
[6] Tralac 8th edition (2022b, p. 11).
[7] Tralac 9th edition (2022a, p. 14).

### 12.2.1 *Background of the NPS*

An NPS as defined by the BIS encompasses a set of instruments, banking procedures and, typically, a funds transfer system that allows for the circulation of funds.[8] Aside from the payments between banks, a payment system includes the entire payment process, systems, mechanisms, institutions, agreements and also laws that are in place and have an impact on the movement of funds.[9]

Before the National Payment System Act[10] came into effect no legislation specifically governed the NPS. The NPS was established, regulated and contained in selected South African legislation either by common law or in terms of certain provisions.[11] The NPS Act, which came into effect on 28 October 2008, is currently the principal piece of legislation that regulates the NPS.

Over the past years, the South African NPS has developed into a complex environment. For clarity, we can break this environment down into various interlinking payment networks. These networks are the customer network, the payment network, the clearing network, the settlement network and the continuous linked settlement network.[12]

The core of South Africa's payment system is the South African Multiple Option Settlement (SAMOS) system which is owned and operated by the South African Reserve Bank (SARB). The SAMOS is an RTGS system; it enables settlement participants to settle their interbank payment obligations finally and irrevocably. Only banking institutions and designated settlement operators have access to the settlement system.[13]

The continuous linked settlement (CLS) system interlinks with the SAMOS for purposes of settling the rand leg of high-value cross-border foreign exchange transactions.[14] Low-value payments such as remittances are not settled in the CLS system. Such cross-border transactions are settled through cross-border banking relationships.[15]

### 12.2.2 *Oversight of the NPS*

The SARB has described the function of overseeing the NPS as being inclusive of the entire process. This process starts when an end user issues a payment

[8] CPSS A glossary of terms used in payment and settlement systems (2003, p. 36).

[9] SARB (2008) *Financial Stability Review* 39.

[10] Act 78 of 1998.

[11] Lawack-Davids (2008, pp. 453–471).

[12] SARB (2008) *Financial Stability Review* pp. 40–43.

[13] See sections 3 and 4 of the NPS Act.

[14] Lawack-Davids (2008, p. 456). The CLS system eliminates foreign exchange settlement risks by use of Payment versus Payment (PvP). PvP is a mechanism used in a foreign exchange settlement system that ensures that a final transfer of currency occurs if, and only if, a final transfer of the other currency or currency takes place. Both legs of the foreign exchange transaction are settled within the CLS system. At the present moment two South African Banks, ABSA and Standard Bank, are members of the CLS system. Members of the CLS system have direct access to the CLS Bank and settle transactions across the CLS system on behalf of themselves or third parties.

[15] Bank for International Settlements (BIS) *Payment systems in the SADC*, p. 158.

instruction to pay another person or business; it ends when the beneficiary receives payment.[16] It covers all the arrangements and procedures that exist to cater for clearing, settlement of the payment instruction and payment towards the intended beneficiary.[17]

The efficiency, as well as safety, of an NPS plays a crucial part in ensuring the overall stability of the country's financial sector.[18] It is therefore necessary for some form of oversight to be put in place. In South Africa, the SARB Act provides for such oversight.[19] Section 10(1)(c) of the Act expressly empowers the SARB to perform, inter alia, functions that allow it to regulate and oversee the payment system. In turn, the SARB has established a National Payment System Department which bears the responsibility of overseeing the NPS. [20]

The BIS has defined the function of overseeing the NPS as being:

> [A] central bank task, principally intended to protect the smooth functioning of a payment system and to protect the financial system from possible 'domino effects' which may occur when one or more participants in the payment system incur credit risk or liquidity risk.[21]

The BIS definition of 'oversight' gives a notion of why it is necessary for an NPS to be overseen. Payment systems are subject to a number of risks, namely, credit,[22] liquidity,[23] legal[24] and operational risks.[25] A participant that incurs either credit or liquidity risk may compromise the capacity of other system participants or of financial institutions in other parts of the financial system to fulfil their financial obligations as they become due.[26]

The risk of detrimental effects being imposed on other participants due to, amongst others, credit or liquidity problems faced by another participant in the system is known as systemic risk.[27] It is submitted that the potential threat of

[16] SARB (2006) *The National Payment System Framework and Strategy: Vision 2010*, p. 11.

[17] *Supra*.

[18] SARB (2008) *Financial Stability Review*, p. 40.

[19] Act No 90 of 1989. The Act was amended in 1996 in order to clarify the role of the SARB in regard to the national payment system.

[20] As stated above in para 3, the supervisory and regulatory powers of the SARB are enhanced by the National Payment System Act No 78 of 1998—hereinafter referred to as the NPS Act.

[21] BIS 'A glossary of terms used in payments and settlements systems', p. 37.

[22] The risk that a participant will not be able to fully meet its financial obligations within the system.

[23] The risk that a participant within the system will have insufficient funds to fulfil financial obligations within the system as, and when, they become due.

[24] The risk that a poor legal framework will cause or exacerbate credit or liquidity risks.

[25] The risk that operational factors such as technical malfunctions or operational mistakes will cause or exacerbate credit or liquidity risks.

[26] This is what is referred to as a 'domino effect' in the BIS description of the function of overseeing an NPS.

[27] Section 12(1) of the NPS Act. See also CPSS 'A glossary of terms used in payments and settlement systems' (2001, p. 48).

systemic failure makes it necessary to control access to the NPS and monitor the activities of participants.[28]

Remittances, as stated by Bester et al,[29] are a payment system phenomenon. Providers of remittance services fall within the payment system, albeit at a lower level of the entire system or the 'outer layer'. Remittance transactions can be categorised in the retail payment system of the NPS. The latter system primarily deals with consumer payments of relatively low value. In contrast to systematically important payment systems,[30] they are generally not viewed as being a threat to systemic stability.[31] The BIS and World Bank have stated that, as remittances are low-value payments, credit or liquidity failure by a remittance service provider is unlikely to cause systemic risk in the NPS.[32]

The SARB has, however, stated that retail payment systems can collectively form systematically important payment systems.[33] I submit that this makes oversight of retail payment systems necessary. There are further reasons for the necessity of oversight of retail payment systems: they facilitate day-to-day consumer transactions. They can also, in the event of inefficiency and failure, compromise public confidence in and the integrity of the NPS.[34] Given the above, SARB oversight of formal, as opposed to informal, remittances would make the use of formal remittance channels preferable, especially from a cross-border payment perspective.

Having discussed the NPS in South Africa, the next section delves into the models of cross-border payments. Within the discussion of these models, the section presents a brief overview of the SADC-RTGS and the Pan-African Payment and Settlement System PAPSS. The section also reviews the challenges associated with the various models. The identified challenges form the bedrock for exploring the prospects of adopting CBDCs to improve cross-border payments.

[28] For more detail on NPS oversight in South Africa, see the National Payment System Department Oversight Framework October 2016 available on the SARB's website at http://www.resbank.co.za (accessed 16 February 2022).

[29] Finmark Trust 'Reviewing the policy framework for money transfers' 2010, p. 2.

[30] These are payment systems with participants that handle high-value transactions and can, in the event of risk exposure, trigger systematic disruptions amongst other system participants or financial institutions in other financial areas. See CPSS 'Core principles for systemically important payment systems' (2001, p. 5), CPSS 'A glossary of terms used in payments and settlement systems' (2001, p. 48) and the report prepared for the Competition Commissioner by the Competition Commission bank enquiry panel (2006, p. 407).

[31] Report prepared for the Competition Commissioner by Competition Commission bank enquiry panel, p. 407 http://www.copcom.co.za/technical- report (last accessed 8 December 2010).

[32] CPSS (2001) *General principles for remittance services*, p. 18.

[33] SARB (1995–2005) *The National Payment System in South Africa*, p. 15.

[34] SARB (2006) *The National Payment System Framework and Strategy: Vision 2010*, p. 11; see also the report prepared for the Competition Commissioner by Competition Commission bank enquiry panel, p. 411. http://www.copcom.co.za/technical-report (last accessed 8 December 2010).

## 12.3 Models of Cross-Border Payment and Associated Challenges

Different financial consumer classes, including households, small- and medium-sized enterprises (SMEs), large corporates and governments, make cross-border payments both within and outside the context of intra-African trade. Households may use cross-border payments for purchasing goods or services from foreign suppliers or sending money to friends and family abroad.[35] On the other hand, SMEs and large corporates may use cross-border payment to purchase raw materials or sell their products to foreign markets.[36] Cross-border payments enable various financial consumer classes to participate in international trade and access new markets. It is necessary to have cross-border payment systems that meet the needs of consumers.[37] The adequacy and suitability of any cross-border payment system depends on its ability to guarantee that the needs of financial consumers are met in a manner that is secure, timely and affordable.

Cross-border payments are formally and commonly channelled through banks. Cross-border payments through banks in Africa are defined by various challenges; they are costly, slow and have limited accessibility.[38] Expectedly, these challenges pose adverse implications to those engaging in intra-African trade. The predominance of these challenges is attributable first to regulatory frameworks which are often complex and varied across different countries.[39] Second, there is a lack of transparency in the pricing of cross-border payment services, resulting in discriminatory and excessive fees. Third, there is limited access to banking infrastructure.[40] The banking infrastructure in many African countries is not well developed.[41] Fourth, there are technical barriers, such as outdated technology and the lack of interoperability between payment systems.[42] These challenges reduce the competitiveness of African businesses in the global market; they also limit the potential for intra-African trade.

Broadly, cross-border payments can be conducted either formally or informally. Formal cross-border payments are those that are made through official channels, such as banks, international money transfer services or payment processing platforms. Informal cross-border payments, on the other hand, are those that occur outside formal channels. It is worth noting that informal

[35] The Committee on Payments and Market Infrastructures (CPMI) *Cross-Border Retail Payments* BIS Paper 173 (2018, p. 3).

[36] CPMI *Retail Payments* (2018, p. 3).

[37] Fineksus *Cross-border Payments, New Models and the Future* https://fineksus.com/cross-border-payments-new-models-and-the-future/ (accessed 3 November 2022).

[38] Bindseil and Pantelopoulos (2022, pp. 8–9), see also Adrian et al. (2022, p. 6), Carstens (2020, p. 18), Frost (2020, p. 76), He et al. (2017, p. 20).

[39] CPMI *Enhancing Cross-border Payments* (2020, p. 2), see also Inai 'Guide on how to make cross-border payments faster and cheaper'.

[40] CPMI (2020, p. 2), see also Inai 'Guide on how to make cross-border payments faster and cheaper'.

[41] Ibid.

[42] Ibid.

cross-border payments can be more difficult to track and may be associated with higher levels of risk, such as the potential for fraud or money laundering. As a result, many businesses opt for formal cross-border payment methods, even though they may be more expensive or require more paperwork.

The following four legal models or systems that are used for formalised cross-border payments stand out:

### *12.3.1 Correspondent Banking Model*

The correspondent banking model is a cross-border payment system that involves banks working together to facilitate transactions between customers in different countries.[43] This is how it works: suppose a customer of Bank A in country X wants to send money to a customer of Bank B in country Y. Bank A will initiate the payment by sending the money to Bank B through a correspondent banking relationship. A correspondent bank will be a financial institution that has a relationship with both Bank A and Bank B and facilitates the transfer of funds between them.[44] In this model, the correspondent bank acts as an intermediary between the sending bank (Bank A) and the receiving bank (Bank B). The correspondent bank can perform various services to help complete the transaction, such as foreign exchange conversion, routing the payment through local payment systems and ensuring compliance with international regulations.

In exchange for its services, the correspondent bank charges both Bank A and Bank B fees, which can include transaction fees, foreign exchange fees and other fees for compliance and regulatory requirements. Overall, the correspondent banking model allows banks to offer cross-border payment services to their customers, even in countries where they do not have a direct presence or relationship with a local bank. It helps to facilitate global trade and commerce; it can also provide financial access to individuals and businesses in remote or underserved areas.

However, the model can be costly; the complexity associated with finding and using intermediaries can furthermore pose challenges to payment transactions in intra-African trade. In addition, the lack of standardisation and harmonisation of financial systems can make cross-border payments under the corresponding bank model both a slow and difficult to process, leading to delays and inefficiencies in the flow of goods and services between countries.

### *12.3.2 Closed Loop*

The closed loop model is a cross-border payment system that involves transactions being processed through a proprietary network; all transactions must pass

[43] Bech and Hancock (2020, pp. 32–33), see also CPMI *Retail Payments* (2020, p. 13), Denecker et al. (2016, p. 3), Wandhöfer and Casu (2018, p. 8).

[44] Bech and Hancock (2020, p. 33), CPMI *Retail Payments* (2020, p. 13), see also Wandhöfer and Casu (2018, p. 9). Brandl and Dieterich (2021, pp. 11–14).

through that network to be processed. In this model, there is a single central payment service provider (PSP) that provides services to both the payee and the payer.[45] This means that the PSP handles the entire transaction process, from the point where the payer initiates the payment to the point where the payee receives the funds.[46] For example, Western Union and MoneyGram have for a significant period of time been facilitating remittances, using closed loop systems.[47] They have established a physical presence in all the areas where they operate without mandating users to create an account. Users of these services are not restricted to remitting funds to individuals who also maintain accounts at the same financial institution. This is the case even if both the sender and the recipient of a certain transaction use that bank.[48]

The main disadvantage is that Western Union and MoneyGram operate during the same hours as traditional financial service providers like banks and agent offices.[49] Therefore, to send or receive money, either the sender or recipient must wait for location business hours, or the locations must offer bank accounts with mobile application access. This could act as a barrier to financial inclusion for the approximately 1.4 billion unbanked people globally, according to the World Bank.[50] Second, these services are costly, with higher fees than competitors such as mobile money. In addition, cash pickups may result in much lower exchange rates than the standard rate in the country. A third issue is the lack of transparency in fees for money transfers. Fees can vary depending on various factors such as the recipient's country, the amount being sent and the chosen payment method. The fees are calculated separately for each transaction amount and payment method; they are not fixed.[51]

### *12.3.3 Infrastructure Model*

The infrastructure payment model, also known as a real-time payment system, is a type of electronic payment system that enables immediate and continuous transfer of funds from one bank account to another.[52] In this model, transactions are processed through a central clearing house that acts as a hub for all payments. The clearing house is connected to multiple financial institutions and other

[45] Also known as an in-house or intragroup transfer system. See Bech and Hancock (2020, p. 33).

[46] Bech and Hancock (2020, p. 33).

[47] These are international money transfer service providers enabling individuals who may or may not have access to traditional banks to immediately transfer funds across international borders. See also Bech and Hancock (2020, p. 33), CPMI *Retail Payments* (2020, p. 13), Selbach and Lana (2015, p. 104), Bindseil and Pantelopoulos (2022, pp. 17–18).

[48] Bech and Hancock (2020, p. 33), CPMI *Retail Payments* (2020, p. 13).

[49] Western Union (2022), MoneyGram *How to receive with MoneyGram.*

[50] Western Union (2022), MoneyGram (note 51 above), Demirgüç-Kunt et al (note 21 above) 33.

[51] Gotradingasia. The pros and cons of using Western Union (accessed 4 November 2022).

[52] Bech and Hancock (2020, p. 33), CPMI *Retail Payments* (2020, p. 13), Bech et al. (2020, p. 54), Brandl and Dieterich (2021, pp. 11–14).

payment service providers.[53] When a customer initiates a payment, the transaction is sent to the clearing house, which then routes the payment to the recipient's bank. The recipient's bank confirms the transaction; the funds are immediately transferred from the sender's account to the recipient's account. This process takes place in real time, typically within a few seconds or less.

Infrastructure payments are designed to offer fast, secure and reliable payment services; they have several advantages over traditional payment methods, such as cheques and wire transfers. For example, they can help to reduce the risk of fraud and errors, provide faster access to funds and enable more efficient cash management for businesses. [54]

The main challenge with this model is that the payment infrastructure linkages can be costly to establish and maintain; they may require significant investment in technology and resources. However, these linkages are more likely to be formed in regional blocs or countries with high economic activity and/or migration movements. These movements occur because of the technical, legal and operational expenses, and the complexity of setting up and maintaining payment infrastructure links.[55] Clear and simple agreements across payment infrastructures, interoperability arrangements and standardising operating procedures are all examples of possible regional and cross-regional payment infrastructure integration.[56]

The SADC-RTGS is an example of the infrastructure model that has been subregionally established in Africa while the PAPSS is a continent-wide example.

The SADC cross-border, remote-accessible, single-currency system is known as the SADC-RTGS.[57] It was established in 2013.[58] The payment infrastructure was intended to settle cross-border payment transactions more quickly, securely and cheaply.[59] In addition, it was meant to settle cross-border payment transactions without relying on intermediary banks from outside the region.[60] Banks from SADC countries that are qualified to hold South African rand accounts in the SADC-RTGS may access the system and make payments from their

[53] Bech and Hancock (2020, 33), CPMI *Retail Payments* (2020, p. 13), Brandl and Dieterich (2021, pp. 11–14).

[54] See Fig. 9.2 For a descriptive explanation of how RTGS systems work see also ML Bech & J Hancock 'Innovations in payments' March 2020 Bank of International Settlements Quarterly Review 21–34, p 33; The Committee on Payments and Market Infrastructures CPMI Cross-Border Retail Payments (CPMI Paper 173, 2018, p. 13).

[55] See generally Bech and Hancock (2020, p. 33), CPMI *Retail Payments* (2020, p. 13), Bech et al. (2020, p. 54).

[56] CPMI *Retail Payments* (2020, p. 13), see also Brandl and Dieterich (2021, pp. 11–14).

[57] These countries are Tanzania, Angola, Malawi, Botswana, Namibia, Comoros, Eswatini, the Democratic Republic of the Congo, Lesotho, Seychelles, Madagascar, Zimbabwe, Mauritius, Mozambique, South Africa, Zambia; see also Bech et al. (2020, p. 57), Domingo (2022, p. 7), Pretorius et al. (2022, p. 334).

[58] Bech et al. (2020, p. 57), Domingo and Teevan (2022, p. 7).

[59] SARB *Regional Settlement Services.*

[60] SARB (2006), Domingo and Teevan (2022, p. 7).

respective country.[61] The SADC payment system oversight committee is accountable for the ownership and management of the system. The SARB, which hosts the system, uses the same RTGS infrastructure as its domestic system.[62]

However, the use of the SADC-RTGS for cross-border payments is extremely restricted. Currently, the SADC-RTGS settles only high-value cross-border payment transactions.[63] Another significant disadvantage of the platform is that it is expensive.[64] Owing to these factors, the SADC-RTGS serves little use in promoting intra-African trade. The majority of SMEs who transact low-value payments with counterparts in the SADC region cannot use the SADC-RTGS.

PAPSS is a financial market infrastructure designed by Afreximbank in partnership with the African Union and African Continental Free Trade Area (AfCFTA) Secretariat that enables cross-border payment transactions throughout Africa.[65] It was launched in 2022.[66] The payment infrastructure operates by linking the RTGS systems of various African Central Banks to provide payment and settlement services to commercial banks, fintech and PSPs in Africa.[67] It is unique in that it allows payments and settlements to be made using local currencies.[68] Therefore, by offering a straightforward, inexpensive and risk-controlled payment clearing and settlement mechanism, PAPSS can simplify trade and other economic activities between African countries. This is a departure from the expensive and time-consuming correspondent banking methods currently in use.[69] It furthermore tackles the issue of money laundering, which costs Africa billions of dollars annually, while also extending financial services to the informal economy.[70] Moreover, PAPSS's real-time infrastructure provides a reliable and cost-effective solution for fast payments in a variety of contexts, such as online shopping, wire transfers, salary payments, stock trading and low- and high-value commercial transactions.[71]

Like any new payment system, PAPSS encounters two significant challenges. According to the chief executive officer of PAPSS, the adoption and acceptance of the system by financial institutions and end users is the primary challenge.[72] Financial institutions (such as commercial banks) will have to recognise the value that the infrastructure brings to the table in terms of speed, low cost and the assurance of funds receipt. Therefore, these banks must be able to communicate this value to their cross-border payment-making customers.[73] Second

[61] Bech et al. (2020, p. 57), Domingo and Teevan (2022, p. 7).
[62] Bech et al. (2020, p. 57), Domingo and Teevan (2022, p. 7), Pretorius et al. (2022, p. 320).
[63] Southern African Development Community (SADC) Oversight Report (2017–2019, p. 5).
[64] SADC Oversight Report (2017–2019, p. 6).
[65] Tralac 8th edition (2022b, p. 11).
[66] International Trade Administration; African Continental Free Trade Area (AfCFTA), Pan-African Payment and Settlement System (PAPSS) (last assessed 3 November 2022).
[67] AfCFTA; PAPSS.
[68] Tralac 8th edition (2022b,, p. 11).
[69] AfCFTA; PAPSS.
[70] Ibid.
[71] Ibid.
[72] The Paypers. Constantinovici (ed) (Interview).
[73] Ibid.

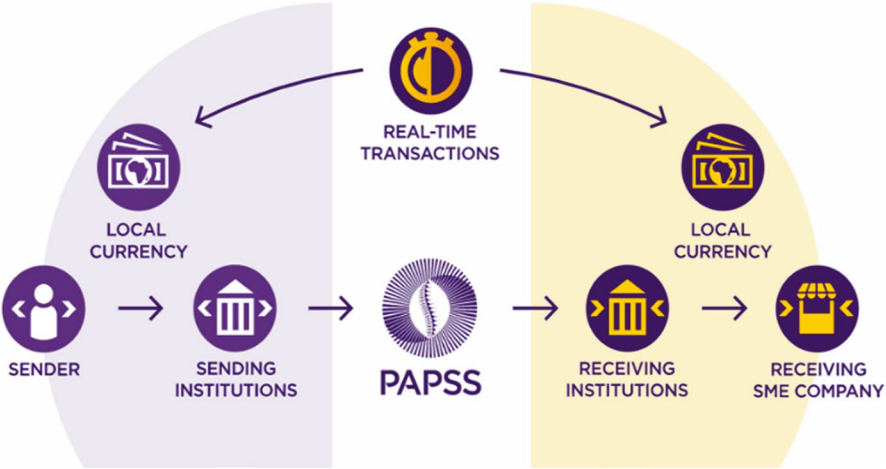


**Fig. 12.1** How the Pan-African Payment and Settlement System (PAPSS) operates. (Source: PAPSS. Initially, the sender issues payment instructions to its local bank or payment service provider; then, the bank sends instructions to its central bank; PAPSS receives and validates the instruction and forwards it to the central bank and then the local bank of the beneficiary; finally, the local bank pays the transferred funds to the beneficiary in the beneficiary's local currency. See PAPSS)

is the adaptation of financial institutions to ISO 20022,[74] the most recent payment standard used by PAPSS. Since this is the case, financial institutions and PSPs will have to adapt to this new standard in order to make use of PAPSS (Fig. 12.1).[75]

### *12.3.4 Peer-to-Peer (P2P)*

This model involves the direct exchange of funds between individuals or businesses without the need for intermediaries.[76] The main advantage of this model is that it can reduce the cost and complexity associated with having intermediaries facilitating cross-border payments. These factors make the P2P model attractive to SMEs participating in intra-African trade. A P2P user may quickly send money from his bank account or mobile wallet to another P2P user's bank account or mobile wallet using electronic channels such as the Internet or a mobile device.[77]

[74] ISO 20022 is an international standard for financial institutions to exchange electronic messages, enabling payment processing and settlements to use higher-quality, more comprehensive data. The Reserve bank of South Africa notes that the adoption of the ISO 20022 standard will enhance compliance and transparency, boost efficiency and interoperability, improve the user experience and accelerate the harmonisation of payment systems. See generally SARB *ISO 20022 FAQ*, p. 1; Society for Worldwide Interbank Financial Telecommunications (Swift) *What is ISO 20022*?

[75] The Paypers. Constantinovici.

[76] CPMI *Retail Payments* (2020) 14.

[77] Page One Economics Focus on Finance Caceres-Santamaria (2020, pp. 1–2), see also Mattern and McKay (2018, pp. 14–16), Lawack (2012, p. 317).

In the light of the recent COVID-19 pandemic, there has been a surge in demand for mobile payments, particularly mobile money. According to a report by the Global System for Mobile Communications Association (GSMA), the mobile money industry facilitated transactions worth over US$1 trillion in 2021.[78] The report also indicates that there were 1.35 billion registered accounts globally in 2021, which is an increase of 18% from the previous year and ten times higher than the number of accounts in 2012.[79] The adoption of mobile money grew by 48% in 2021 compared to the previous two years, with international remittances accounting for 16 billion of the total US$1 trillion in transactions.[80]

The findings of the report reveal that some government and regulatory initiatives in some nations have had a negative influence on mobile money services, despite their enormous success in several countries. These initiatives include taxes, poorly constructed fast payment systems and expensive data localisation regulations.[81] Complying with these requirements imposes significant costs on both PSPs and consumers, which may have a negative impact on future investments and the use of mobile money services.[82] To prevent negative policy and regulatory interventions, the report emphasises the need for effective communication between decision makers, regulators and industry leaders.[83]

Generally, the different models of making cross-border payments each have their own advantages and disadvantages. Their impact on intra-African trade depends on various factors, such as cost, efficiency, security and standardisation. The key to promoting the growth of intra-African trade is to find the right balance between these factors and to invest in the development of payment systems that can support the needs of consumers. The following section explores how CBDCs could be adopted to improve cross-border payments for intra-African trade.

## 12.4 Exploring CBDCs as Cross-Border Payment Option: Recent Developments

CBDC is a digital version of a country's fiat currency that is issued and backed by a country's central bank.[84] CBDCs are designed to operate on a blockchain-based platform, which makes them secure, fast and cost-effective.[85] The purpose of CBDCs is to provide a digital alternative to physical cash, which is becoming less popular due to the rise of digital payments. There are two types

[78] Andersson-Manjang and Naghavi (2021, p. 6).
[79] Ibid.
[80] Andersson-Manjang and Naghavi (2021, p. 7), see also Cooper et al. (2019, p. 7).
[81] Andersson-Manjang and Naghavi (2021, pp. 30–32).
[82] Ibid.
[83] Andersson-Manjang and Naghavi (2021, p. 320), see also Lawack-Davids (2012).
[84] Bossu et al. (2020, p. 6), see also Mancini-Griffoli et al. (2018, pp. 1–39), Lawack (2022, pp. 118–134).
[85] BIS Annual economic report (2021, p. 65).

of CBDCs: retail and wholesale. Retail CBDCs are intended for use by the general public as a means of payment, similar to physical cash.[86] Wholesale CBDCs, on the other hand, are designed for use between financial institutions, such as central banks and commercial banks, to settle interbank transactions.[87]

By using CBDCs, central banks can increase the efficiency, accessibility and transparency of cross-border payments.[88] First, CBDCs could enable faster and cheaper cross-border payments, reducing settlement times from days to near-instantaneous and decreasing transaction costs.[89] Second, CBDCs could improve financial inclusion by enabling individuals and businesses to access digital payment services and financial services that are currently unavailable or prohibitively expensive.[90] Third, CBDCs could enhance transparency and reduce the risks of money laundering and other illicit activities by providing a traceable and auditable record of transactions.[91] Ultimately, the adoption of CBDCs could contribute to a more integrated and resilient cross-border payment systems.

In the light of the above, the adoption of CBDCs can help to balance the factors of cost, efficiency, security and standardisation in cross-border payments. That would make it easier and more efficient for businesses to participate in intra-African trade. This, in turn, can help promote intra-African trade and support economic development.

### *12.4.1 Proposed Models for Adoption of Central Bank Digital Currency*

After providing an overview of CBDCs in the proceeding section, this section provides a brief explanation of the models for adopting CBDC for cross-border payment.

The Bank for International Settlements has identified three aspects of payment system interoperability that can be used for adopting CBDC for cross-border payment.[92] These aspects can be represented through three distinct models: model 1 involves the development of compatible CBDC systems, model 2 involves the interlinking of CBDC systems and model 3 involves the creation of a unified system for CBDC.[93] Each of these models is explained as follows:

[86] Lannquist et al. (2021, p. 4).

[87] Opare and Kim (2020), pp. 110810–110847.

[88] Soderberg et al. (2022, pp. 4–7), Koumbarakis and Dobrauz-Saldapenna (2019, p. 8), see also European Data Protection Supervisor.

[89] He et al. (2022, p. 41; BIS (2021b) 'Central Bank Digital Currencies: System Design and Interoperability', BIS Report 2, p. 6.

[90] Koumbarakis and Dobrauz-Saldapenna (2019, 8), see also Soderberg et al. (2022, pp. 4–7).

[91] BIS (2022) 'Options for Access', p. 7.

[92] Auer et al. (2021, p. 10).

[93] Auer et al. (2021, p. 11), see also BIS (2021) 'Cross-Border Payments', p. 9; CPMI (2020, p. 3).

*Compatibility model*: the compatibility model refers to the ability of different CBDCs to work together and be used interchangeably in cross-border transactions.[94] In this model, different CBDCs would be designed to work with each other using common standards, protocols and technical specifications. This would enable users to seamlessly send and receive payments across different CBDC systems without the need for currency conversions or other intermediaries.[95]

*Interlinking model:* the interoperability model refers to the ability of CBDCs to work with other payment systems, including CBDCs, traditional fiat currencies or other digital currencies like cryptocurrencies.[96] In this model, CBDCs would be designed to integrate with existing payment systems and infrastructure, allowing for cross-border transactions between CBDCs and other currencies[97] instead of following the traditional path.[98] The compatibility model may seem confusing with the interlinking model; however, they differ. While both models relate to the use of CBDCs for cross-border payments, they focus on different aspects of the overall system. The compatibility model is more focused on ensuring different CBDC systems can work together; the interoperability model is more focused on integrating CBDCs along with other payment systems.

*Unified system for multi-CBDC model:* this model involves central banks collaborating on a single platform for cross-border payments and settlements that support multiple currencies, including CBDCs.[99] The single multi-currency platform approach would require central banks to agree on a unified set of rules, governance structure and technical standards for the platform.[100] This model would allow for greater efficiency, cost savings and increased transparency and traceability of cross-border transactions. However, it would also require a high degree of coordination and cooperation between central banks.[101]

The challenges for the adoption of CBDCs in cross-border payments will depend on the specific model adopted. However, some common challenges are likely to arise. One of the main challenges is ensuring that the different legal frameworks and regulatory requirements of different jurisdictions are aligned and tailored to the selected model.[102] This includes issues such as the

[94] Auer, Haene and Holden (2021, p. 11), see also BIS (2021) 'Cross-Border Payments', p. 9.

[95] Technical standards such as message formats, encryption methods, data specifications and user interfaces. See Auer et al. (2021, p. 11), see also BIS (2021) 'Cross-Border Payments', p. 9; CPMI (2020, p. 3).

[96] Auer et al. (2021, p. 11), see also BIS (2021) 'Cross-Border Payments', p. 9; CPMI (2020, p. 3).

[97] Ibid.

[98] Ibid.

[99] Ibid.

[100] Ibid.

[101] Ibid.

[102] World Bank (2021)., p. 25

recognition of digital identities, data protection, privacy and cybersecurity.[103] In addition, issues related to the cross-border movement of funds and compliance with anti-money laundering (AML) and counter-terrorism financing (CTF) regulations need to be tackled.[104]

Second, there may be challenges in ensuring compliance with competition law; for example, the creation of a single platform for cross-border payments and settlements may reduce competition in the market.[105] Other potential challenges include the enforcement of cross-border contracts, the resolution of disputes and the allocation of liability in the event of fraud or other legal violations.[106]

Some central banks have been working on CBDC projects specifically focused on cross-border use cases. These projects have involved collaborations with other central banks and international organisations such as the BIS to explore the technical and regulatory challenges of cross-border CBDC payments. One such project is the Project Dunbar. This project is a joint effort between the BIS Innovation Hub Singapore Centre, the Reserve Bank of Australia, Bank Negara Malaysia, the Monetary Authority of Singapore and the SARB.[107] The goal of Project Dunbar is to create a more open, accessible and efficient payment system that can support a wide range of currencies and payment methods.

Project Dunbar has demonstrated that financial institutions can conduct transactions with one another on a common platform using CBDCs issued by participating central banks.[108] By doing so, this approach has the potential to decrease dependence on intermediaries, resulting in reduced processing time and costs associated with cross-border transactions.

Furthermore, the project identifies challenges like trade-offs in access models, AML and know-your-customer (KYC) compliance, cross-border payment regulation and infrastructure; it also shows the challenge of whether to extend access beyond banks.[109] The project brought to light the intricate nature of sharing critical financial infrastructure among multiple central banks, with each jurisdiction having its unique set of requirements. As a solution, the project recommended the single multi-CBDC platform model, which could be implemented as a sequence of regional platforms, rather than a single global platform.[110]

[103] BIS (2022) 'Options for Access', p. 25; see also The Financial Action Task Force (FATF) (2021) 'Opportunities and Challenges', pp. 36–43.

[104] BIS (2022) 'Options for Access', p. 25; see also BIS (2021) 'CBDCs for Cross-Border Payments', p. 36; FATF (2021) 'Survey Results', pp. 15–16; Ballaschk and Paulick (2021), pp. 277–286.

[105] World Bank (2020), p. 25.

[106] World Bank (2021), pp. 24–25.

[107] BIS Innovation Hub (2022), p. 2.

[108] BIS Innovation Hub (2022), p. 2.

[109] BIS Innovation Hub (2022), p. 31.

[110] BIS Innovation Hub (2022), p. 33.

## 12.5 Analysis/Concluding Remarks

SADC is made up of 16 member states, each with its own regulatory bodies responsible for overseeing the NPS and the broader financial sector. The adoption of CBDCs for cross-border payments in SADC would require numerous considerations. A major consideration is whether SADC should develop a new system of cross-border payment or whether it should rely on an existing system. It is submitted that the SADC region can rely on the existing SADC-RTGS as the platform or basis for implementing its subregional cross-border CBDC project.

Another consideration is on the type of model that should be used for the cross-border CBDC project. It is suggested that the unified multi-CBDC model may offer more opportunities than the other models. Furthermore, for the SADC-RTGS framework to work effectively with a CBDC, it would likely be beneficial if other participating countries have adopted their respective CBDCs.

Apart from the above, there are numerous other measures that are necessary for adopting cross-border CBDC in SADC. These include some steps that regulators in the SADC region could take to make the SADC-RTGS more efficient and effective and to establish a sound legal framework for CBDC adoption:

A. Establish clear regulatory frameworks: Regulators in the SADC region would need to establish clear regulatory frameworks for CBDCs. This would involve defining the legal status of CBDCs, outlining their operational parameters and establishing guidelines for CBDC issuance and circulation.
B. Governance and oversight: Regulators in the SADC region should establish clear governance and oversight mechanisms for the CBDC system. This includes ensuring transparency, accountability and clear lines of responsibility, and establishing effective dispute-resolution mechanisms.
C. Harmonise regulations: Since the SADC region is made up of multiple countries with different regulatory frameworks, harmonising regulations would be important to ensure the seamless integration of CBDCs into the SADC-RTGS system.
D. Develop interoperability standards: To ensure that the SADC-RTGS system can accommodate CBDCs issued by different central banks within the region, regulators would need to develop interoperability standards that facilitate cross-border transactions.
E. Develop security standards: To ensure the security of CBDC transactions, regulators would need to develop security standards for the SADC-RTGS system that take into account potential threats such as cyber-attacks, fraud and money laundering. Regulators also need to train staff and partner with international organisations to enhance cybersecurity measures.

F. Promote financial inclusion: CBDC adoption could promote financial inclusion in the SADC region by providing a secure and affordable means of payment for individuals and businesses. Regulators could work with traditional financial institutions, fintech companies and other stakeholders to ensure that CBDCs are accessible to all segments of society.
G. Raise public awareness: Regulators could raise public awareness about the benefits of CBDC adoption and the measures in place to ensure the safety and efficiency of the SADC-RTGS system.
H. Transparency: The infrastructure should be transparent in its operations and provide clear and accessible information to users about its services, associated costs and limitations.

In conclusion, the successful adoption of cross-border CBDCs in the SADC region requires a collaborative effort between regulators, financial institutions and the public. Each stakeholder has a distinct role to play in ensuring the success of the CBDC project. By working together, these stakeholders can establish a robust and secure payment system that promotes financial inclusion, supports intra-African trade and enhances regional integration.

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PART IV

# Trade and Economic Performance

CHAPTER 13

# Macroeconomic and Welfare Implications of FTAs: The Harnessing Role of Trade Infrastructure—The Case of AfCFTA

*Festus Ebo Turkson*

## 13.1 Introduction

Free Trade Areas (FTAs) are important within the global multilateral trading systems and have become increasingly popular over the last five decades. FTAs have the potential to unlock the economic growth of economies, enhance efficiency and competition toward industrialization, ensure technology adoption and transfer, and more generally improve economic welfare by ensuring access to a variety of goods.

As noted by Turkson (2012), the popularity of economic integration and trade agreements within the global economy has been generally driven by economic, political, and security considerations. Economically, Crawford and Fiorentino (2005) argued that the proliferation of trade agreements and economic integration efforts seems to have been driven by the desire of many countries to access larger markets either bilaterally or multilaterally because of the unwillingness of World Trade Organization (WTO) members to commit to further multilateral liberalization. This implies that for those countries that consider trade agreements as a complement to most favored nation (MFN) preferences under the WTO, participating in a regional trade agreement (RTA) does serve as a channel for maintaining their market access opportunities where MFN-driven liberalization has been absent (Turkson, 2012). Beyond larger

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_13

market access, RTAs also promote trade liberalization regional integration, investment, competition, labor standards and environmental sustainability.

As of December 2022, the General Agreement on Tariffs and Trade (GATT) which later transformed into the WTO had been notified of 806 RTAs out of which 582 were cumulative notifications in force. Of these, 355 were active. FTAs make up over 56% of the RTAs in force, while about 52% of the active RTAs cover goods and services (the remaining 48% cover either only goods or only services). In line with the spirit of reciprocity, all RTAs are reciprocal between the members.

The popularity of FTAs has been due partly to the relative success of the European Union (EU) and the North America Free Trade Area (NAFTA). In the case of Africa, which has enormous natural resources and is home to about 1.48 billion people (18.4% of the world's population of about 8.04 billion in 2023[1]), the existence of a continental FTA holds huge economic promise for most countries. It has the potential to increase the continent's intra-regional trade from the relatively low of 16.6% and significantly lower the continent's trade deficit.

While the African Continental Free Trade Area (AfCFTA) can unlock the trade potential of the Africa, its realization depends on the extent to which members can avail themselves to the enormous opportunities that AfCFTA offers and most importantly how the sub-region can address and surmount the various obstacles to trading across the continent. The continent's limited intra-regional trade and large trade deficits can very much be attributed to several structural bottlenecks and obstacles, of which the policy-related non-tariff barriers and the lack of or limited infrastructure are the key obstacles. As noted by UNCTAD (2019) low performance in trade facilitation indicators is hampering the development of trade in the region.

This chapter seeks to discuss and analyze the potential trade impact of AfCFTA in reducing trade costs and creating jobs. In addition, the chapter discusses the potential trade diversion and/or trade creation impact of the AfCFTA for member countries, and the welfare implications for consumers and producers within Africa. The chapter concludes with identifying the various obstacles relative to trade infrastructure that can hinder and/or offer opportunities for the realization of the potential macroeconomic and welfare impact of AfCFTA.

## 13.2 Literature on the Potential Trade Impact of FTAs and the Role of Trade Infrastructure

Although the trade literature abounds with extensive and varied theoretical and empirical studies on the ex-post effect of trade agreements and FTAs on bilateral trade flows, the conclusions have remained unambiguous. According to Turkson (2012), the various theoretical models and/or arguments only pointed

[1] As of 12 June 2023.

to the potential important effects and causal channels through which trade agreements in the form of FTAs can impact on bilateral trade flows without coming up with conclusions. The empirical literature on the developing world also remains inconclusive and thus has only confirmed the inconclusive nature of the theoretical debate.

The traditional Heckscher-Ohlin model (HOM) has often been cited as the main theoretical argument by pessimists on the impact of trade agreements on bilateral trade flows. The key insights of the HOM are that factor endowment differences among countries could be a basis for trade, and that trade could lead to factor price convergence between trading partners. The HOM posits that countries should export products that utilize their abundant factor endowments and import products that utilize the countries' scarce factor endowments. The implication is that a capital-abundant country will export products from its capital-intensive industries to labor-abundant countries, and the labor-abundant countries by importing capital-intensive goods will in return export labor-intensive products to the capital-abundant countries.

For natural resources-abundant/endowed countries, the HOM implies that such countries will have to specialize in the production and export of natural resource-based (i.e., primary) products to capital-abundant countries. According to Turkson (2012), granted that the HOM explains the pattern of trade flows, RTAs and therefore FTAs in SSA are not expected to contribute significantly to intra-SSA bilateral trade (South-South trade) as compared to trade agreements with developed and/or capital-abundant developing countries (North-South trade). This obviously does not explain the increasing number of RTA/FTA notifications and active RTAs in force under the General Agreement on Tariffs and Trade (GATT)/WTO over the past five decades.

Overtime the HOM seemed to have failed to explain the patterns of global trade, as increasingly most trade was between countries with similar technologies, and similar factor proportions and where quite similar goods are often both exported and imported by the same country. This implied that intra-industry trade where a country both exports and imports same products came to dominate inter-industry trade as posited under the HOM. Therefore, the traditional view that a given country would have a comparative advantage in terms of technology or factor endowments could not explain the observed intra-industry trade that was dominating the pattern of trade.

Interestingly the new trade model of increasing returns, monopolistic competition, and economic geography by Krugman shows that international trade based on economies of scale, love for variety, network effects, and first-mover advantage could be the reason behind the current wave of globalization in which there is intensive trading between similar economies and within the same industry. Indeed, unlike the old trade theories that assume specialization in production and trade, the new trade theory explained why over time it was difficult to observe many differences between what countries produced and exported and what they imported from trading partners. It thus seems that the new trade theory of increasing returns, monopolistic competition, and

intra-industry trade was more suited in explaining why we increasingly observe South-South or North-North trade and the proliferation of RTAs in the form of FTAs within the global trading system.

Arising from the new trade theory by Krugman is the issue of trade costs that has come up lately to explain the pattern of trade. Indeed, Krugman (1991) observed that a sizable amount of trade creation results from trade agreements between geographically close countries because of lower transportation costs (i.e., the concept of "natural trading partners"). If in a world of identical countries, two countries who are "natural trading partners" do benefit from an FTA more than two unnatural trading partners (Frankel et al., 1995, 1996, 1998) then it is more likely that such SSA countries would form an RTA. Thus, increased trade among similar countries, within same industries, and natural trading partners seems to have encouraged interest in RTAs; the empirical evidence of whether countries that join an RTA/FTA observe increased trade among members has remained inconclusive.

Studies including Frankel and Wei (1997) and Frankel et al. (1998) found evidence that belonging to FTAs and customs unions reduces trade barrier costs and therefore increases trade flows. As noted by Turkson (2012), these studies were unclear which of the elements of trade agreements play a significant role, whether reductions in tariffs or reductions in NTBs or regulatory issues account for the significant impact of FTAs and custom unions on trade flows. Seeking answers to these questions has become crucial because of the inability of studies (such as Harrigan, 1993; Head & Mayer, 2000; Chen, 2002; and Lee & Swagel, 1997) to establish significant effects of NTBs on aggregate trade flows.

With regards to SSA, findings from studies on the trade effect of RTAs within the sub-region confirm the fragility of the estimated effect of the FTA treatment on trade flows. Johnson (1995), Lyakurwa et al. (1997), Yang and Gupta (2005), and Chacha (2008) confirmed that the various regional economic communities (RECs) in SSA which had trade agreements imbedded have not enhanced trade among member countries mainly as a result of inadequate trade facilitation, inadequate trade infrastructure, less product differentiation, small and fragile markets, high external trade barriers, and the lack of strong and sustained political commitment to reduce tariff barriers. On the contrary, other studies such as Deme (1995), Elbadawi (1997), Cernat (2001), Carrère (2004), Coulibaly (2007), and Afersorgbor and van Bergeijk (2011), Turkson (2012), Turkson (2015), and Turkson et al. (2023) found RTAs within SSA to have significantly increased trade flows among member countries suggesting that SSA RTAs have been trade-creating.

Using a panel of West African countries from 1975 to 1991, Deme (1995) estimated the ex-post trade effect of belonging to the ECOWAS FTA. By making use of different estimation procedures, Deme (1995) found ECOWAS members to have traded between 50% and 170% more among member countries than with non-ECOWAS members. In a related study, Elbadawi (1997)

found intra-regional imports to have increased by 31% on average among members belonging to RTAs within SSA without causing any trade diversion.

Cernat (2001) carried out a pooled cross-sectional analysis of the trade impact of belonging to ECOWAS, South African Development Cooperation (SADC), and Common Market for East and Southern Africa (COMESA). Cernat found that for the years 1994, 1996, and 1998 trade among ECOWAS (compared to non-ECOWAS members) and SADC members (as compared to non-SADC members) increased due to the greater trade facilitation that existed among members. Carrère (2004) using a panel of 150 countries trade with ECOWAS, SADC, and COMESA between 1962 and 1996 confirmed the findings from Cernat (2001). Carrère (2004) accounted for the possible endogeneity of the belonging to an RTA and found ECOWAS and SADC to have contributed to increased intra-regional trade flows by a factor of 0.2 and 2.7 times, respectively.

Afersorgbor and van Bergeijk (2011) carried out an investigation of the relative trade impact of ECOWAS and SADC RTAs on bilateral trade of its members compared to their participation in the European Union-African Caribbean Pacific Preferential Trade Agreement (EU-ACP PTA). Using a gravity model of 35 countries between 1995 and 2006, Afersorgbor and van Bergeijk (2011) found that, comparatively, ECOWAS and SADC membership did significantly increase bilateral trade flows more than the bilateral trade impact of the EU-ACP PTA. Interestingly, on the endogeneity of the RTA membership and trade, Afersorgbor and van Bergeijk (2011) treated the RTA dummy as exogenous, arguing that within SSA the membership of SSA RECs was driven by geopolitical considerations rather than trade; therefore, the possibility that SSA countries which trade more intensively were more likely to form an RTA was highly unlikely.

Turkson (2012, 2015) estimated a gravity model augmented with measures of trade agreements using bilateral trade flows and key gravity covariates from CEPII database on 73 countries (48 SSA and 25 EU countries) over the period 1960–2006. The objective of the study was to find out if the EU trade preferences under the EU-ACP PTA and regional trade agreements under the RECs within SSA had increased trade flows. After accounting for the endogeneity of the trade agreement dummy, multilateral price resistance, and including zero-valued trade flows, Turkson (2012) found that the EU-ACP PTA and RTAs within ECOWAS and SADC did have a positive and significant impact on bilateral trade involving the member countries. In some cases, the relative impact of the sub-regional RTAs was found to be stronger than the EU-ACP non-reciprocal PTA.

Turkson et al. (2023) assessed the trade effect of sub-regional trade agreements (SSA RTAs), other non-tariff barriers, and financial integration on bilateral trade flows involving 43 Sub-Saharan Africa (SSA) countries over 55 years from 1960 to 2015. Controlling for the endogeneity of the trade agreement dummy, multilateral price resistance, and zero-valued trade flows, Turkson

et al. (2023) found membership among ECOWAS and SADC to have had a positive and significant impact on bilateral trade.

## 13.3 The African Continental Free Trade Area

The AfCFTA is one of the flagship projects of the African Union (AU) under its Agenda 2063 which seeks to transform Africa into a global powerhouse by 2063 through the attainment of inclusion and sustainable development on the continent. AfCFTA was approved by the 18th Ordinary Session of the Heads of States and Governments in Addis Ababa, Ethiopia, in January 2012, came into force on 30 May 2019, and commenced trading on 1 January 2021. The agreement seeks to purposely create the world's largest Free Trade Area (in terms of participating countries) to contribute to the bigger vision of deepening economic integration (facilitated by the free movement of persons) in Africa to provide greater opportunities for Africa's structural transformation, economic diversification, and economic development. According to the World Bank (2020), the agreement which aims to create a liberalized market for goods and services for a continent of over 1.3 billion people across 55 countries with a combined GDP of US $3.4 trillion is expected to contribute to the movement of natural persons and capital and increase intra-regional trade to about 50% by 2030.

To achieve the broad objectives of the AfCFTA, the specific objectives that must be achieved include the progressive liberalization of trade-in services, the deepening of cooperation in all matters relating to customs and trade issues (competition policy, investment, etc.), and the gradual riddance of both tariffs and non-tariff barriers. The resulting free-trade region that is created presents participating countries the opportunity to take advantage of scale economies to overcome various challenges as they trade among themselves. This continent-wide free trade agreement is thus expected to enhance regional cooperation and integration.

The AfCFTA agreement specifies a two-phase implementation plan to ease negotiations on the provisions and operationalize the agreement. The first phase considers trade in goods and services and involves tariff liberalization, dealing with non-tariff barriers, trade remedies, trade facilitation via the harmonization of documents and customs cooperation, rules of origin, issues relating to transit and transit facilities, technical barriers to trade, dispute settlement, standards, and institutional provisions. Trade in services is also concerned with air and maritime transportation, insurance coverage for tourism, and financial services and banking (African Union, 2018).

The second phase deals with negotiations that relate to investment and competition policy, intellectual property rights, as well as digital trade, and women and youth in trade. It should be noted that under both phases 1 and 2 trade facilitation is a key vehicle that can ensure the success of the AfCFTA.

As of June 2022, there were 44 state party actors, the manual to guide the AfCFTA tariff concessions was ready, as well as 87.7% of total tariff lines under

the Rules of Origin protocol of the AfCFTA. In addition, the Secretariat is focusing on four areas under the trade in goods, namely, pharmaceuticals and vaccines; agribusiness; automotive and logistics, and transport sectors. Already US $1 billion has been secured for the automotive value chain and industrialization. An adjustment fund of US $1 billion has also been set aside to offset short-term revenue losses resulting from members reducing or eliminating tariffs. The Pan African Payment and Settlement System (PAPSS) has also been launched to allow trading in 42 different currencies on the continent. There were clear indications that the phase 2 negotiations were to be concluded by September 2022. Unfortunately, most of the customs authorities have not passed legislative instruments to allow AfCFTA tariff procedures to run smoothly.

## 13.4 Potential Macroeconomic Impact of AfCFTA

According to Crawford and Fiorentino (2005), the proliferation of trade agreements within the developing world since the 1990s has stemmed from the desire to implement domestic trade reforms aimed at opening their economies at a sustainable pace to competitive liberalization so as to facilitate the integration of their economies into the world trading system. With respect to SSA, Turkson (2012) noted that the efforts to put in place regional and sub-regional trade integration initiatives have been aimed at bringing together intra-Africa RTAs and to establish regional trading blocs with Asia and America. This is ultimately expected to boost SSA's contribution to global trade. This has been against the background of the SSA's insignificant contribution to global trade. Indeed, the AfCFTA is expected to boost intra-SSA trade and the continents' contribution in the future to about 25%.

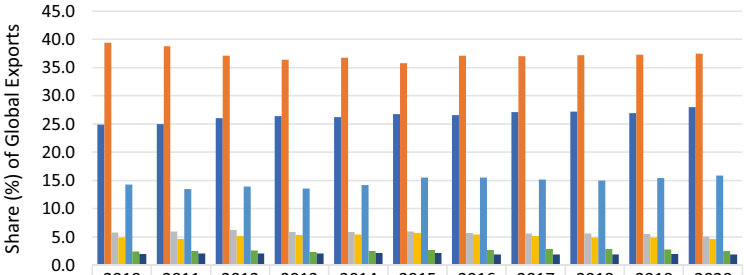
This section discusses the contribution of SSA to global trade and the factors responsible for the poor performance. The section also discusses the potential macroeconomic impact of AfCFTA.

### *13.4.1 SSA Contribution to Global Trade*

In terms of global trade, Sub-Saharan Africa (SSA) continues to lag behind all other regions. Its contribution to global exports remains at the periphery, contributing less than 2% to global export trade within the past decade (Fig. 13.1).

With regards to shares of global imports (Fig. 13.2), SSA was one of the least averaging about 2.5% of global imports. The share of SSA was on average higher than South Asia, which contributed on average the lowest share globally of not more than 2%.

The share of intra-regional trade in SSA is also among the lowest globally, though in recent years, it has seen marginal changes with a decline in 2021. As can be observed in Fig. 13.3, intra-regional trade for Africa increased from 16% in 2018 to 17.8% in 2020 but declined to 12.7% in 2021. Though comparatively the other regions recorded a marginal change in their intra-regional




| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| East Asia & Pacific | 24.9 | 25.0 | 26.0 | 26.4 | 26.2 | 26.7 | 26.6 | 27.1 | 27.2 | 26.9 | 28.0 |
| Europe & Central Asia | 39.4 | 38.8 | 37.1 | 36.4 | 36.8 | 35.8 | 37.1 | 37.0 | 37.2 | 37.3 | 37.5 |
| Latin America & Caribbean | 5.7 | 5.9 | 6.2 | 5.9 | 5.9 | 5.9 | 5.7 | 5.6 | 5.6 | 5.6 | 5.1 |
| Middle East & North Africa | 4.9 | 4.6 | 5.2 | 5.3 | 5.4 | 5.7 | 5.4 | 5.2 | 4.9 | 4.9 | 4.6 |
| North America | 14.2 | 13.5 | 14.0 | 13.5 | 14.2 | 15.5 | 15.5 | 15.2 | 15.0 | 15.4 | 15.9 |
| South Asia | 2.4 | 2.5 | 2.6 | 2.4 | 2.5 | 2.6 | 2.7 | 2.9 | 2.9 | 2.8 | 2.5 |
| Sub-Saharan Africa | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 |

**Fig. 13.1** Regional shares of global exports (2010–2020). (Source: World Integrated Trade Solution (WITS) Database (assessed May 2023))

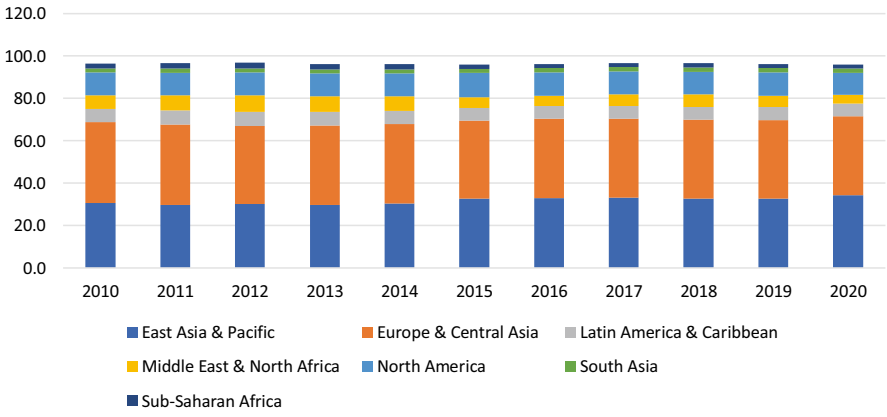
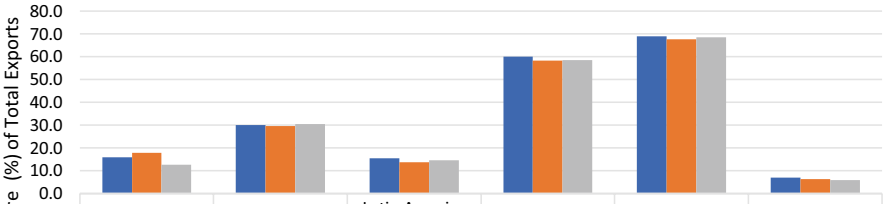



**Fig. 13.2** Regional shares of global imports (2010–2020). (Source: World Integrated Trade Solution (WITS) Database (assessed May 2023))

trade, the relatively lower intra-regional trade in SSA was significantly higher than in OCENIA and similar to Latin America. Obviously the COVID-19 pandemic seems to have impacted on intra-SSA trade.

Though there are various reasons that account for this, the similarity in comparative advantage implies that SSA countries will trade less among themselves compared to their trade with other regions. In addition, many African countries have small, fractured, and partly isolated markets and poor state of




| | Africa | Northern America | Latin America and the Caribbean | Asia | Europe | Oceania |
|---|---|---|---|---|---|---|
| 2018 | 16.0 | 30.0 | 15.5 | 60.0 | 69.0 | 7.0 |
| 2020 | 17.8 | 29.7 | 13.7 | 58.3 | 67.7 | 6.4 |
| 2021 | 12.7 | 30.4 | 14.5 | 58.5 | 68.5 | 5.8 |

**Fig. 13.3** Intra-regional trade. (Source: UNCTAD Handbook of Statistics, 2019, 2021, 2022)

infrastructure, making trading across borders costly hence the lower intra-regional trade.

It is clear from the figures that the highest levels of intra-regional trade are recorded in Europe, Asia, and North America. In addition to Oceania and Latin America, Africa recorded the lowest rates of intra-regional trade. Africa needs to harness the potential of the AfCFTA to significantly increase its share of intra-regional trade and this can be more effective if the factors that contribute to high trade cost within the sub-region are significantly addressed.

### *13.4.2 Potential Impact of AfCFTA on SSA Economies*

Obviously the AfCFTA will have an impact on the macroeconomies of SSA countries. As at the end of 2021, SSA had a population of 1.18 billion people across the 55 countries with a combined gross domestic product (GDP) valued at about US $2.0 trillion. Per number of members, it will be the largest FTA, and this obviously offers enormous opportunities for trade to be used as a potent tool of development among the member countries. According to Ngom (2023), the World Bank estimates that AfCFTA will increase Africa's income by $450 billion by 2035 and increase intra-African exports by more than 81%. The UN Economic Commission for Africa (UNECA) also estimates that the single market trade agreement will enable the African economy to reach the $29 trillion mark by 2050 by boosting intra-African trade by 52.3% (after the elimination of tariff and non-tariff barriers).

The AfCFTA will also diversify intra-African trade as it would encourage more industrial goods, as opposed to extractive goods and natural resources. Currently, less than 20% of African exports are sourced from within the sub-region because of the lack of value addition and exports of primary products and this is expected to be increased by 81% by 2035. The expected increase in exports resulting from the AfCFTA in the form of higher value addition exports

(simple manufactures at the least) will provide an opportunity for countries in SSA to competitively integrate into the global economy. *The* Economist (2022) argues that if AfCFTA is able to remove tariff barriers this could increase trade between countries in different SSA RECs by 15–25% and this is expected to increase to 30–50% if non-tariff barriers are reduced.

The AfCFTA has the potential to impact on the economies of SSA by increasing industrialization and export diversification on the continent. As noted by Aryeetey et al. (2021), SSA countries have achieved some of the fastest growth in recent times compared to other regions, yet this has not culminated in increased employment and improvement in employment conditions. Indeed, the significant growth has rather come at the cost of precarious and vulnerable employment, especially among the youth. Indeed, the services-driven growth trajectory in SSA has been contrary to the norm, as countries within the sub-region have failed at manufacturing export-led transformation that was expected to provide low- to medium-skilled jobs for the youth. Thus, as Aryeetey et al. (2021) noted, this has brought to fore the need for SSA to redirect attention toward employment-generating sectors including agro-processing industrialization and tourism especially in the case of Ghana. Through agro-processing industrialization and tourism SSA countries will be able to diversify their export base from traditional primary exports to higher value addition.

Agro-processing industrialization and tourism have the potential to offer employment opportunities and wages for low- to medium-skilled workers. This is so because both sectors have improved regulatory environment, improved trade-related infrastructure, huge export capacity and competitiveness, labor-intensive technology, and have enormous prospects for addressing the unemployment challenges of the youth who have at least secondary education (Aryeetey et al., 2021).

The AfCFTA will also provide an opportunity for the harmonization of regulation in other important trade-related policy areas such as investment, competition, intellectual property rights, and e-commerce. Although attempts have been made to address these under the various RECs in the past, they have not been substantially addressed among the RECs and therefore at the sub-regional level.

As of 2015, AfDB (2016) estimated that Africa had over 400 million young persons aged 15–35 years, with two-thirds either vulnerably employed or unemployed or discouraged. The ILO (2014) projected that by 2022, over 122 million young persons will be expected to join Africa's labor force. As noted by Aryeetey et al. (2021), it is therefore imperative for Africa to find ways to boost employment to improve the livelihood of the youthful population of sub-region. Indeed, one of the main anchors of the AfCFTA is to spur economic growth through trade to provide opportunities for the youth and women to meet SSA's development blueprint—"Agenda 2063."

As noted by Ngom (2023), if AfCFTA can empower the youth and women it will lift millions out of poverty. This is so because in Africa the youth and

women face difficulties in accessing the opportunities in formal employment, especially in the case of women because of the patriarchal customs that make women subordinate to men imposing gender-based constraints for women in accessing formal sector employment and decent jobs. Increased intra-regional trade would be realized if AfCFTA enables firms increase productivity along the agricultural value chain as this will in no doubt create job opportunities for the youth and women, especially since the youth and women are very much involved in cross-border trade. Thus, AfCFTA will be able to address gender inequality in Africa by offering formal sector and decent job employment opportunities for women and this will lower the gender wage gap experienced in Africa.

Apart from reducing gender inequality, the AfCFTA is expected to assist in reducing poverty, hunger, diseases, and ultimately contribute toward the achievement of the Sustainable Development Goals (SDGs) as envisaged under the Agenda 2030 plan. Indeed, based on a developmental approach that embraces greening, AfCFTA by covering trade and industrialization, infrastructure (both soft and hard), as well as political and macroeconomic stability could help lift about 30 million people from extreme poverty and 68 million from moderate poverty by 2035 (Mangeni & Atta-Mensah, 2022).

On the revenue impact, the World Bank (2020) noted that the short-term impact of the AfCFTA on tax revenues would be small for most countries (less than 2% decline in revenues) mainly because imports from African countries account for less than 10% of tariff revenues for most countries and given that the agreement allows for exclusion lists for most tariff revenues, those State parties that have a relatively higher share of tariff revenues from African countries can make use of the exclusion list to minimize the potential revenue losses. In the medium term the World Bank (2020) notes that there will be a positive impact on import tariff and total revenue at the regional level, because, although there will be a liberalization in tariffs, the subsequent increase in the volume of imports and higher economic growth which will ultimately lead to a higher levels of economic activity in most state parties will most likely increase tariff revenue collection and the total revenues by at least 3% at the continental level.

## 13.5 Trade Creation, Trade Diversion, and Potential Welfare Implications of AfCFTA

The basis for trade agreements has always centered on the arguments for the trade creation versus trade diversion and this is well grounded in the seminal work by Viner (1950). In his analysis of the immediate static effect of PTAs, Viner (1950) argued that a trade agreement in the form of a PTA does improve the welfare of a member country if the trade diversion is significantly higher than the trade creation, and that a trade agreement only improves the welfare

of its members if the benefits obtained from the trade creation dominate the losses from trade diversion.

According to Turkson (2012), while trade diversion can be viewed as a negative consequence of a trade agreement for both members and non-members, trade creation can be associated with gains from free trade. Trade diversion is the shift of production and imports of products from efficient/low-cost external suppliers (i.e., non-member countries) to inefficient/high-cost member countries, while in contrast, trade creation results from a shift of production and domestic consumption of products from high-cost domestic suppliers to production and imports from low-cost suppliers from an RTA member country as a result free trade. This implies that trade is created when there is new trade that would not have existed without the trade agreement, making trade creation beneficial in terms of increasing national welfare to all the members that signed the trade agreement. Trade diversion unfortunately involves the shift of trade away from an existing efficient non-member trading partner toward a new relatively inefficient free trade agreement partner and is this often detrimental to the country's national welfare.

As noted by Turkson (2012), for the skeptics, in so far as trade diversion outweighs trade creation, a trade agreement will be harmful to both member and non-member countries. For developing countries, Hine (1994) argues that the risk that trade diversion outweighs trade creation is high because developing countries tend to have less efficient production methods. In addition, the skeptics also argue that even if a trade agreement leads to increase in bilateral trade flows amongst members, it isn't a sufficient condition for welfare enhancement because what matters is the net effect of trade creation and trade diversion (the increase in intra trade flows is a necessary condition though). Trade creation may result from a shift of domestic consumption from high-cost domestic products to low-cost products from a partner country as a result of elimination of trade barriers. Thus, trade between partner countries increases in accordance with international comparative advantage.

For developing countries that tend to have less efficient production methods, Hine (1994) argues that the risk of trade diversion outweighing trade creation and thus negatively affecting welfare should be taken into consideration. Theoretically there are two necessary conditions under which welfare gains will exceed welfare losses. First, the price elasticity of import demand between member states should be greater than unity (i.e., must be price elastic) and the price differences should be higher than the price difference between member states and the world market. Second, if more goods are imported from non-member states before the formation of the RTA, there is a high tendency of trade diversion. On both accounts the necessary conditions are not met and therefore African RTAs would have limited trade creation and probably negative welfare effects.

Wonnacott and Lutz (1989) and Krugman (1991) identified three main factors that are responsible for substantial trade creation and welfare gains. These include geographical proximity, intra-industry, and inter-industry trade

determinants. Empirical evidence shows a sizable amount of trade creation resulting from trade agreements between geographically close countries because of lower transportation costs (i.e., the concept of "natural trading partners"). In addition, there is evidence to confirm substantial trade creation from economies of scale in the presence of differentiated products when the two countries signing the trade agreement are large and of similar economic size. In situations where there are significant differences in factor endowment ratios comparative advantage ensures that there are potential significant gains from trade creation.

Urata and Okabe (2013) examined the impacts of regional trade agreements (RTAs) on trade flows at product level, particularly focusing on trade creation and diversion. Using the gravity equation and controlling for zero trade flows and endogeneity bias the study concentrated on RTAs involving 67 countries for 20 products over the period 1980–2006. Urata and Okabe (2013) found that compared to developed countries, RTAs among developing countries tend to cause trade diversion and that there was trade created for many products in the cases of customs unions and plurilateral RTAs. Their results implied that there are other factors that cause trade creation besides just the reduction in tariffs. Urata and Okabe (2013) therefore concluded that external tariff rate reduction is an important factor in avoiding trade diversion in the formation of RTAs, especially for RTAs among developing countries, while a large number of members and the common external tariff appear to be important for generating the trade creation effect.

## 13.6 Trade Infrastructure to Harness the Gains from AfCFTA

### *13.6.1 Infrastructure for Trade*

The realization of the objectives of the AfCFTA depends, to a large extent, on the way various obstacles hampering intra-regional trade on the African continent are addressed, and one such obstacle is trade facilitation in the form of trade infrastructure. Trade facilitation has become important in recent growth and development discourse. It refers to the reduction of non-tariff transaction costs at the border, which entails the standardization and simplification of customs procedures and administrative formalities connected to international trade (Portugal-Perez & Wilson, 2012). Trade facilitation can be executed by investing in two broad dimensions of infrastructure, namely, hard and soft infrastructure. Hard infrastructure refers to the physical and tangible infrastructure that facilitates trade, such as roads, highways, ports, and railroads, while soft infrastructure refers to information communication technology (ICT), transparency, regulatory environment, customs management, the business climate, and other intangible institutional indicators that are regarded as tools used in stimulating/facilitating trade (Portugal-Perez & Wilson, 2012).

The impact of infrastructure on trade flows is well documented in the trade literature. Turkson (2015) cites various studies (such as Bougheas et al., 1999; Limao & Venables, 2001; Francois & Manchin, 2006; Turkson, 2012; etc.) that have looked at the impact of trade infrastructure on trade costs and flows and concluded that the level/state of infrastructure is one of the main determinants of trade costs, especially in developing countries. According to Turkson (2012), because of the poor state or lack of infrastructure to produce and compete effectively in export markets, many developing countries especially in SSA and South Asia have not been able to take advantage of globalization to increase trade and that there developing regions have little or no trade with the rest of the world.

In a global economy that has become increasingly integrated and value chains that cross national borders more prominent, trade infrastructure that minimizes trade costs has become "sine qua non" for competitiveness. Trade infrastructure, both hard and soft, has become crucial along the trade value chain, impacting the cost of transport services, telecommunication, business services, and finance. As noted by UNCTAD (2021), the poor performance of shipping and ports in developing countries mainly because of lower levels of digitalization and diseconomies of scale explains why developing and especially SSA countries are further removed or remote from global market centers. Undoubtedly trade infrastructure enhances physical connectivity both within and among countries thereby facilitating the movement of goods and services.

### *13.6.2 SSA Infrastructure Challenge: Implications for AfCFTA*

Africa's land area is big enough to accommodate China, India, the United States, and most parts of Europe (Economist, 2022), yet intra-regional export is estimated at approximately 16.6% as at 2020, and this is one of the lowest when compared to intra-regional exports in Europe (68%), Asia (58%), and North America (30%). One of the reasons for this low turnout is the weak infrastructural connectivity between countries on the African continent.

Almost all estimates of SSA's infrastructural gap point to the extent to which the continent is atomized. For instance, the World Bank ranked SSA at the bottom of all developing regions in virtually all dimensions of infrastructure performance: namely, telecommunication, energy, and transport. Particularly for trade, SSA ranks lowest in terms of the percentage of paved as well as railroads and their quality. SSA is again the only continent where road density had declined over the past two decades (see Table 13.1).

Particularly in the case of railways, most of the infrastructure was built during the colonial period and linked various sources of natural resources (i.e., mines) to the ports. These railways were never intended to support intra-regional trade on the continent. Not much has been done to develop rail infrastructure with linkages to most of Africa's landlocked countries. Due to the high number of landlocked countries most intra-continent trade is done through inland road networks. As of 2014, SSA had about 10,000 km of a

**Table 13.1** Infrastructure quantity trends

| | *SSA* | *SA* | *MENA* | *LAC* | *EAP* |
|---|---|---|---|---|---|
| *Transport* | | | | | |
| Paved roads (*share of paved roads (%)*) | | | | | |
| 1990 | 17 | 45 | 54 | 18 | 58 |
| 2010 | 16 | 53 | 79 | 24 | 71 |
| WEF—Road Quality *Score (0, worst—7, best)* | | | | | |
| 2006 | 2.41 | 2.98 | 4.18 | 3.06 | 4.52 |
| 2015 | 3.34 | 3.95 | 3.97 | 3.57 | 4.53 |
| WEF—Rail Quality *Score (0, worst—7, best)* | | | | | |
| 2009 | 1.93 | 3.24 | 3.24 | 1.53 | 3.57 |
| 2015 | 2.23 | 3.88 | 2.99 | 1.89 | 4.31 |
| *Telecommunications* | | | | | |
| Telecommunication Index—*fixed and mobile telephones per 1000 people (median)* | | | | | |
| 1990 | 3 | 7 | 38 | 55 | 17 |
| 2014 | 736 | 807 | 1323 | 1240 | 1444 |
| Internet density—*number of users per 100 people (median)* | | | | | |
| 2005 | 1.3 | 2.1 | 11.2 | 12 | 11.8 |
| 2015 | 16.7 | 22 | 48.5 | 51.6 | 45 |
| Fixed broadband—*number of subscriptions per 100 people (median)* | | | | | |
| 2005 | 0.0 | 0.1 | 0,4 | 0.8 | 1.4 |
| 2015 | 0.2 | 1.2 | 4.3 | 8.1 | 9.1 |
| *Power* | | | | | |
| Electricity generating capacity—*megawatts per 1000 people (median)* | | | | | |
| 1990 | 15.5 | 19.4 | 10.2 | 15.4 | 10.1 |
| 2014 | 16.7 | 17.7 | 13.8 | 13.6 | 6.8 |

*SSA* Sub Saharan Africa, *SA* South Asia, *MENA* Middle East and North Africa, *LAC* Latin America and the Caribbean, *EAP* East Asia and Pacific

Source: Calderon et al. (2018)

collection of routes that link the major seaports to inland markets mainly by road. Known as the SSA transport corridors, it's divided into central, south, east, and west, with each corridor made up of smaller transport routes that remain largely unconnected to each other.

Unfortunately, within SSA most road network systems are dysfunctional mainly due to poor construction and inadequate maintenance. Less than a fifth of total road network in SSA was paved. In Ghana for instance although over 97% of freight and passenger traffic is by road only 17% of the estimated 68,000 km of road network is paved. In Cameroon less than 10% of the 50,000 km of road network is paved.

With regards to the ports, most ports in Africa are small and it takes relatively more time to process freight in Africa, especially when compared to the rest of the world. For instance, while it takes less than a week to process shipped cargo in Asia, Europe, and Latin America, it takes more than two weeks on average to do the same in most African countries. The cost of handling port cargo is again much higher in Africa. The AfDB estimates that the handling

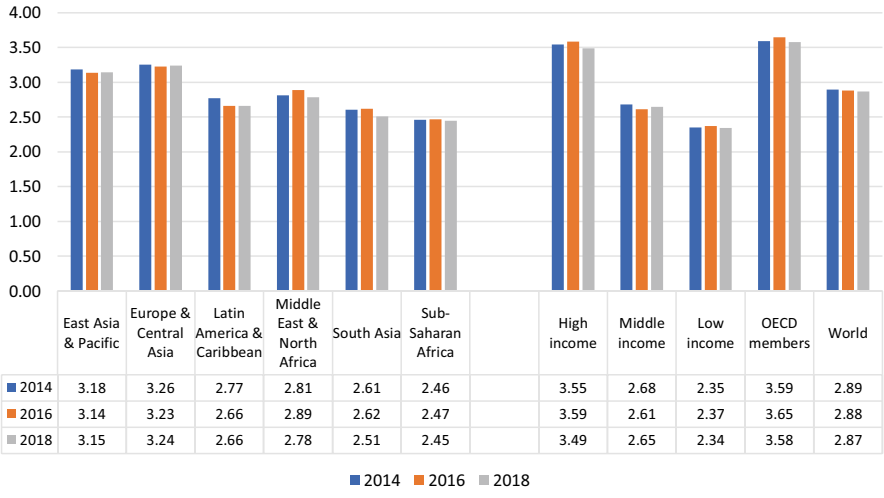
cost of shipped cargo in Africa is about 50% higher in Africa when compared to the rest of the world (AfDB, 2015).

With regards to soft infrastructure, this chapter will make use of the World Bank's Logistics Performance Index (LPI) that seeks to measure the logistics performance of countries and sub-regions. The LPI is a metric that assesses the logistics "friendliness" of the nations in which they operate and trade. The index ranges from 1 to 5, with a higher score representing better performance. The index targets six key dimensions, namely the efficiency of customs clearance processes, quality of trade and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time.

Figure 13.4 shows that the countries with much improved and friendly logistics are the more advanced and higher-income countries and vice versa.

It can again be shown that Africa again ranks lowest on all six dimensions of the LPI. Based on average LPI between 2007 and 2018, Table 13.2 indicates that SSA has the lowest index for the ability to track and trace consignment, the competence and quality of logistics, the ease of arranging competitively priced shipments, the efficiency of customs clearance process, the frequency with which shipments reach consignee within scheduled or expected time, and the quality of trade and transport-related infrastructure (see Appendix for detailed annual performance indicators).

The COVID-19 pandemic caused a sharp drop in worldwide seaborne trade, which was quickly recovered in late 2020, mostly in container and dry bulk shipping. The recovery, however, caused a slew of logistical issues, driving




| | East Asia & Pacific | Europe & Central Asia | Latin America & Caribbean | Middle East & North Africa | South Asia | Sub-Saharan Africa | | High income | Middle income | Low income | OECD members | World |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2014 | 3.18 | 3.26 | 2.77 | 2.81 | 2.61 | 2.46 | | 3.55 | 2.68 | 2.35 | 3.59 | 2.89 |
| 2016 | 3.14 | 3.23 | 2.66 | 2.89 | 2.62 | 2.47 | | 3.59 | 2.61 | 2.37 | 3.65 | 2.88 |
| 2018 | 3.15 | 3.24 | 2.66 | 2.78 | 2.51 | 2.45 | | 3.49 | 2.65 | 2.34 | 3.58 | 2.87 |

**Fig. 13.4** Logistics performance across income groups and regions. (Source: World Bank LPI Database)

**Table 13.2** Six dimensions of logistics performance

| *Indicator* | *SSA* | *EAP* | *ECA* | *EU* | *LAC* | *MENA* | *SA* | *World* |
|---|---|---|---|---|---|---|---|---|
| | Average index 2007–2018 (1 = low to 5 = high) | | | | | | | |
| Ability to track and trace consignment | 2.4 | 3.2 | 3.2 | 3.5 | 2.7 | 2.8 | 2.5 | 2.9 |
| Competence and quality of logistics services | 2.4 | 3.1 | 3.2 | 3.5 | 2.6 | 2.7 | 2.5 | 2.8 |
| Ease of arranging competitively priced shipments | 2.5 | 3.1 | 3.1 | 3.4 | 2.7 | 2.8 | 2.6 | 2.8 |
| Efficiency of customs clearance process | 2.3 | 2.9 | 3 | 3.3 | 2.5 | 2.6 | 2.3 | 2.7 |
| Timeliness of shipments | 2.8 | 3.5 | 3.6 | 3.9 | 3.1 | 3.2 | 2.9 | 3.3 |
| Quality of trade and transport-related infrastructure | 2.2 | 3.0 | 3.1 | 3.4 | 2.5 | 2.7 | 2.3 | 2.7 |

*SSA* Sub Saharan Africa, *SA* South Asia, *MENA* Middle East and North Africa, *LAC* Latin America and the Caribbean, *EAP* East Asia and Pacific. The Average Index for each indicator are obtained from Tables 13.6 to 13,11)

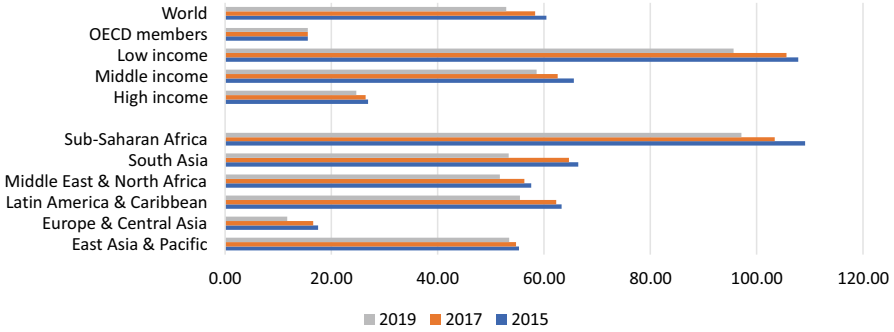



**Fig. 13.5** Time to export, border compliance (hours). (Source: World Bank Trading Across Borders Database (TC360 Data))

up rates and costs, lengthening delays and dwell times, and jeopardizing service dependability. Consumer prices have been affected by the higher freight rates, particularly in the least developed countries, whose consumption and production are more reliant on international trade. The pandemic has also resulted in a severe reduction in investment in transportation, power production, and telecommunications infrastructure (UNCTAD, 2021). To "build back better" after the epidemic, capacity building and massive ramping up of investment for developing countries would be crucial.

The relatively poor state of trade infrastructure in SSA explains why the SSA does poorly with trading across the border. SSA ranks lowest in various trading across borders indicators. It takes African countries approximately 97 hours to be border compliant when exporting in 2019 (Fig. 13.5).

Although this is a marked improvement over the 107 hours in 2014, it is significantly above the world average of 53 hours and even worse when compared to similar statistics from the EU (7.5 hours). Similarly, it takes SSA countries approximately 72 hours to be document complaint when exporting in

2019; this is again above the world's average of 47 hours in 2019; although some overall progress was made between 2014 and 2019 (Fig. 13.6).

With regards to importing, countries in SSA require approximately 127 hours to be border compliant and 96 hours to be document complaint in 2019 (Tables 13.3 and 13.4). This is significantly above the world average of 67 hours and 53 hours, respectively, in 2019. It is important to mention that the continent has witnessed some important progress in all these measures, albeit marginally.

One of the main implications of the infrastructure challenges, and other trade-related challenges, is the high trade cost in Africa. For instance, the money spent on border and documentary compliance when exporting commodities differs by region (see Figs. 13.7 and 13.8). Among all the regions, SSA countries spend an average of over $600 (being the highest cost) in complying with customs and inspection regulations as well as handling costs.

This is higher than the average border compliance cost for low-income countries (about $560). On the contrary, OECD member countries and Europe and Central Asia countries spent about $170 and $118, respectively, on border compliance when exporting in 2019. Figure 13.8 tells a similar story as low-income countries record the highest spending in attempt to comply with the documentary requirements associated with exporting goods and services. This is in contrast with the experience of Europe and Central Asia and OECD member countries.

To further demonstrate the high trade cost associated with intra-regional trade in Africa, we consider the case of Ghana. By relying on data from the ESCAP World Bank, it can be shown that it cost relatively more for Ghana to trade with countries in Africa than to trade with non-African countries (Table 13.5). For instance, it costs Ghana an average of $166 between 2015 and 2019 to trade with Nigeria (which is relatively closer) and $97 to trade with South Africa (which is further away), while it costs approximately $140 to

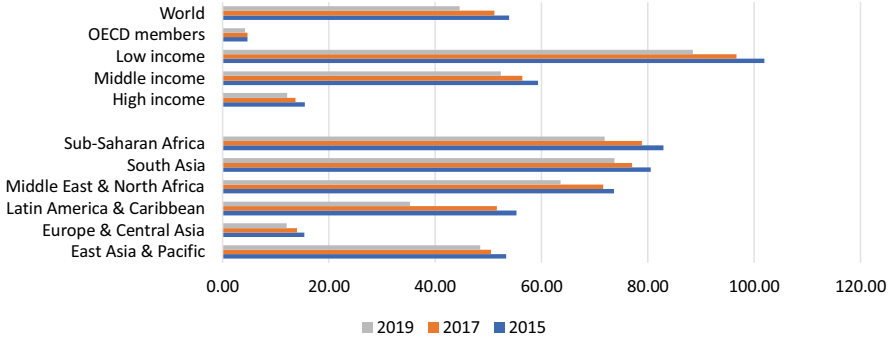



**Fig. 13.6** Time to export, documentary compliance (hours). (Source: World Bank Trading Across Borders Database (TC360 Data))

**Table 13.3** Time to import, border compliance (hours)

| *Region* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 136.7 | 142.7 | 140.4 | 133.7 | 126.3 | 126.2 | 134.3 |
| South Asia | 121.3 | 121.3 | 118.8 | 116.4 | 95.4 | 85.7 | 109.8 |
| Latin America & Caribbean | 65.3 | 63.1 | 64.1 | 63.7 | 62.4 | 55.5 | 62.4 |
| Middle East & North Africa | 114.8 | 108.2 | 112.5 | 111.9 | 103.3 | 92.7 | 107.2 |
| European Union | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| East Asia & Pacific | 63.6 | 61.2 | 65.0 | 64.5 | 63.4 | 62.8 | 63.4 |
| Europe & Central Asia | 14.2 | 12.6 | 12.6 | 11.8 | 10.6 | 10.3 | 12.0 |
| World | 76.2 | 76.2 | 76.7 | 74.5 | 69.8 | 66.9 | 73.4 |

Source: World Bank Trading Across Borders Database (TC360 Data)

**Table 13.4** Time to import, documentary compliance (hours)

| *Region* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 122.8 | 111.2 | 105.9 | 103.0 | 97.7 | 96.1 | 106.1 |
| Middle East & North Africa | 91.9 | 91.7 | 93.2 | 92.0 | 73.9 | 71.0 | 85.6 |
| European Union | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| South Asia | 103.0 | 103.0 | 100.6 | 98.8 | 94.9 | 93.7 | 99.0 |
| Latin America & Caribbean | 92.5 | 88.9 | 81.1 | 77.7 | 76.9 | 43.0 | 76.7 |
| East Asia & Pacific | 53.7 | 53.8 | 52.2 | 51.0 | 49.5 | 46.6 | 51.1 |
| Europe & Central Asia | 14.9 | 15.0 | 14.4 | 14.4 | 12.6 | 11.1 | 13.7 |
| World | 73.0 | 69.8 | 66.8 | 65.1 | 60.6 | 53.0 | 64.7 |

Source: World Bank Trading Across Borders Database (TC360 Data)

trade with the United Kingdom and $129 to trade with the United States, over the same period.

In an online publication of the AfCFTA Secretariat, a creative fashion entrepreneur in Accra indicated that her biggest export markets are in the US and the UK because it is cheaper to ship to these countries than to other African markets. The entrepreneur indicated that shipping a kilo of an item to the US costs $25 compared to the same kilo being shipped to Uganda for $60. What is intriguing is the extent to which distance is not correlated with trade cost and the fact that trade cost is highest with African partner countries.

It is important to indicate that apart from the inefficient bottle-necked port operations, poor inland road quality, slow pace of development of trade-transport infrastructure, and low level of ICT implementation, there are some characteristics that make the infrastructural gap in Africa a much bigger issue with regards to trade facilitation. Africa, and particularly SSA, (1) has the highest number of landlocked countries globally (15 out of 48 SSA countries); (2) is the region with the highest number of small- and low-income countries with limited capacity to expand infrastructure; (3) is the region where international trade taxes are significant source of government revenue; (4) is the region with the highest number of countries that are remote from global market centers;

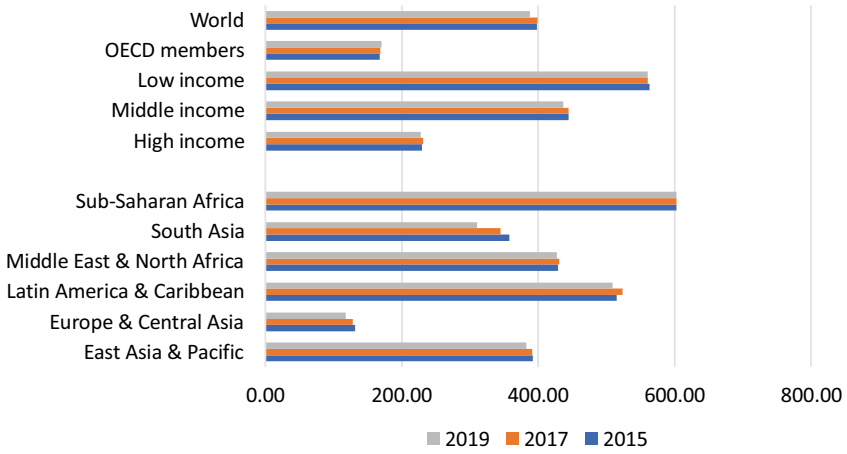



**Fig. 13.7** Cost to export, border compliance (US$). (Source: World Bank Trading Across Borders Database (TC360 Data))

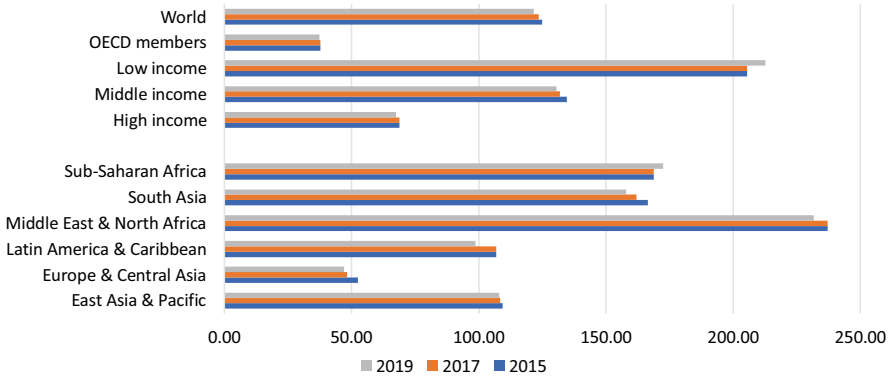



**Fig. 13.8** Cost to export, documentary compliance (US$). (Source: World Bank Trading Across Borders Database (TC360 Data))

and (5) is home to approximately 16% of the world population, most of whom are the youth and underemployed.

From the discussion above, addressing the infrastructural challenge can go a long way in increasing Africa's intra-regional trade.

### *13.6.3 Opportunities to Harness Trade Infrastructure for AfCFTA*

Although the infrastructure gap appears to be a bottleneck to intra-regional trade in Africa, there are some opportunities that the continent can harness to facilitate it more generally.

**Table 13.5** Total trade cost between Ghana and various trading partners

| *Partner name* | *2000–2004* | *2005–2009* | *2010–2014* | *2015–2019* | *Average* |
|---|---|---|---|---|---|
| Nigeria | 164.7 | 131.3 | 136.4 | 166.0 | 149.6 |
| South Africa | 128.9 | 79.0 | 76.2 | 97.2 | 95.3 |
| Ethiopia | 430.8 | 518.3 | 388.3 | 444.2 | 445.4 |
| United Kingdom | 104.6 | 129.1 | 128.5 | 139.7 | 125.5 |
| United States | 171.5 | 172.1 | 158.2 | 129.4 | 157.8 |
| Zambia | 598.1 | 467.2 | 312.5 | 235.4 | 403.3 |
| Kenya | 312.7 | 302.5 | 283.7 | 314.4 | 303.3 |
| Liberia | 136.2 | 199.5 | 164.8 | 141.0 | 160.4 |

Source: World Bank ESCAP Database

The AfCFTA comes with increasing economic integration and cooperation among African countries, and this should encourage huge investments in cross-border infrastructure (CBI). CBI is infrastructure that connects two or more countries, as well as national infrastructure that has significant cross-border impact such as ports, railways, roads, and airports. CBI provides economies with greater access to regional and global markets.

There is the need for countries to cooperate to improve transport corridors within the continent so that they can take up opportunities to join regional production networks and supply chains. Joining regional production networks and supply chains will promote efficient production, trade competitiveness, and increase trade flows, thereby enabling such SSA countries to narrow their development gap with richer trading partners.

With most African states unable to support large infrastructural investments on their own, the reliance on public-private partnerships (PPPs) to build national and cross-border infrastructure is one such viable option. More generally, PPPs distribute resources, risks, responsibilities, and rewards between the public and private sectors, allowing governments to overcome fiscal constraints and filling the funding gap in modern infrastructure. Reasons for encouraging PPPs include access to advanced technology and increased efficiency in project delivery, operations, and management, as the private sector is expected to be more efficient as compared to the public sector.

Various PPPs have been used in a wide range of infrastructure projects in Asia to support both hard and soft infrastructure in the form of transport, energy, and water supply. Fortunately, Africa's private sector has shown some potential to partner with the public sector in a wide range of projects. Involving the private sector in infrastructure development can scale up the level of services and leverage the fiscal resources to allow scarce fiscal funds to be channeled to other pressing needs. PPPs can also bring in private sector skills and expertise to augment the services that can be provided from a given investment or infrastructure facility.

It should be noted that both types of trade infrastructure complement each other and deserve equal attention. Globally, even though hard infrastructure

has received greater attention, the influence of soft infrastructure on trade flows has become more critical today than ever. Soft infrastructure in the form of modern ICT infrastructure, improved customs procedures and administration, trade rules and regulations result in reduced trade costs and therefore increase trade flows. Soft infrastructure has evolved to emphasize the function of hard infrastructure with the former establishing the frameworks and regulations for the latter's development, evolution, and use.

Most African countries have gradually improved their governance structures and undertaken regulatory reforms at their borders and other maritime operations. These can be leveraged to improve intra-regional trade on the continent. For instance, most countries have separated port regulatory functions from their commercial functions. Under most of these systems, national port authorities retained regulatory oversight over the activities of the port, while private sector entities were granted concessions by port authorities to perform warehousing, container handling, and other commercial operations. Enlisting the private sector to invest in port infrastructure and provide expertise in port operations and management has led to a considerable reduction in cargo processing times and costs as well as increasing the productivity of their ports.

Technological change has created a variety of new opportunities for changing the way infrastructure is provided in almost every sector. Particularly for the services sector, micro-electronic monitoring devices and nondestructive testing procedures can help analyze infrastructure facilities (at a lower cost), allowing testing by someone other than the operators. Remotely operated pipe inspection devices, as well as the transition from analogue to digital phone switching, have substantially simplified and decreased maintenance time and expenses. Electronic information systems, such as geographic mapping, help with investment planning and design, as well as network operations coordination. Digitalization in trade facilitation and logistics, which includes in recent times artificial intelligence, digitized flows of information, enhanced tracing and tracking systems, as well as automation, can be leveraged to enhance intra-regional trade on the African continent.

Most African countries are witnessing a shift in mindset, resulting from a better knowledge of the relative strengths and weaknesses of governments and markets, and this is paving the way for infrastructure change. Many countries' efforts in the 1980s to shrink their overburdened public sectors resulted in a greater understanding of what governments and markets can and cannot do. Market liberalization around the world, as well as experimentation with various forms of private sector participation in a variety of sectors, has produced a new body of evidence to support this pragmatic outlook.

Theoretical and institutional advancements have also revealed when and how regulation is required, as well as how to improve its use. As a result of all of this, two basic conclusions may be drawn. First, there are fewer infrastructure operations that require government intervention than previously thought. Second, when necessary, government intervention can be carried out using less distorting public policy instruments than in the past. A good example of the

change in mindset on the continent is the commitment by the UN Economic Commission for Africa (UNECA), AU, and African Development Bank (AfDB) to work together in the development of a trans-African highway network to connect each of the continent's major corridors by filling in infrastructure gaps within the region's transport network.

With the AfCFTA coming into effect, Africa's bargaining power in international trade negotiations is expected to be significantly strengthened and this can be crucial in directing investments in infrastructure (for instance, Aid for Trade). African governments can leverage this bargaining power to support long-term infrastructural investments that span over different countries and across strategic routes within the continent.

## 13.7 Conclusion

AfCFTA will be beneficial to member countries by lowering costs for consumers and producers through reduction in tariffs and the removal of non-tariff barriers (NTBs). The enormous amount of trade that will be realized will transform African economies by generating jobs for the sub-region's youth (through industrialization and export diversification), offer opportunities for woman and vulnerable to close the equity gap, as well as get a sizable number of poor households out of extreme poverty. While AfCFTA has the potential to significantly increase intra-African trade, this can mostly be realized through the removal of various obstacles to trading and the lack of appropriate infrastructure (hard and soft) is one such critical obstacle. Africa's rail network is limited. While most intra-African trade freight goes by road, most roads are in poor condition leading to high transportation and distribution costs and invariably large trade costs.

Even when there are logistic in place, the poor state of such logistics and the small size of our ports lead to a slow-down of processing cargo and this tends to increase trade cost, economic distance (the time and cost of transporting), and business uncertainty. The poor quality of trade logistics and infrastructure can also compromise product quality and export competitiveness and can lead to delays that can be detrimental to various value-chain operations.

Africa's infrastructure gap does not only exist with hard infrastructure but also soft infrastructure in the form of numerous road checkpoints, burdensome customs administrative procedures, and slow processing times at border crossings. Invariably this adds up to the already high intra-SSA trade costs because the continent relies mostly on road infrastructure for transportation of goods and natural persons.

This notwithstanding, there are opportunities that SSA can leverage to increase intra-African trade, and this includes the various state parties encouraging and supporting public-private partnerships (PPPs) to build trade-related infrastructure, improving regulatory regimes mostly at ports and the maritime transport sector, taking advantage of technological change and innovation to

reduce processing times at the ports, and increasing bargaining power in international trade relations that are most likely to evolve with AfCFTA.

Africa leaders should not only pay lip service to the successful establishment of the AfCFTA but should support the building of trade infrastructure to enhance intra-African trade. It is only when Africa's trade infrastructure improves to the level of global standards that the enormous benefits of the AfCFTA would be realized, otherwise, AfCFTA will neither increase intra-regional trade, nor provide greater opportunities for Africa's structural transformation, nor economic diversification, and economic and social development.

## Appendix

Tables 13.6, 13.7, 13.8, 13.9, 13.10, and 13.11.

**Table 13.6** LPI: ability to track and trace consignment (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.3 | 2.5 | 2.4 | 2.5 | 2.4 | 2.5 | 2.4 |
| East Asia & Pacific | 3.0 | 3.2 | 3.2 | 3.2 | 3.1 | 3.2 | 3.2 |
| Europe & Central Asia | 3.1 | 3.3 | 3.2 | 3.2 | 3.2 | 3.3 | 3.2 |
| European Union | 3.4 | 3.6 | 3.5 | 3.5 | 3.6 | 3.6 | 3.5 |
| Latin America & Caribbean | 2.6 | 2.8 | 2.7 | 2.8 | 2.7 | 2.7 | 2.7 |
| Middle East & North Africa | 2.7 | 2.7 | 2.8 | 2.8 | 2.9 | 2.8 | 2.8 |
| South Asia | 2.3 | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 |
| World | 2.7 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 |

Source: World Bank LPI Database

**Table 13.7** LPI: competence and quality of logistics services (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| East Asia & Pacific | 3.0 | 3.0 | 3.0 | 3.1 | 3.1 | 3.1 | 3.1 |
| Europe & Central Asia | 3.0 | 3.1 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| European Union | 3.4 | 3.4 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 |
| Latin America & Caribbean | 2.5 | 2.6 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 |
| Middle East & North Africa | 2.6 | 2.8 | 2.7 | 2.8 | 2.8 | 2.7 | 2.7 |
| South Asia | 2.3 | 2.3 | 2.6 | 2.7 | 2.6 | 2.5 | 2.5 |
| World | 2.7 | 2.8 | 2.8 | 2.9 | 2.8 | 2.8 | 2.8 |

Source: World Bank LPI Database

**Table 13.8** LPI: ease of arranging competitively priced shipments (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| East Asia & Pacific | 3.0 | 3.1 | 3.1 | 3.1 | 3.1 | 3.0 | 3.1 |
| Europe & Central Asia | 3.0 | 3.1 | 3.1 | 3.2 | 3.1 | 3.1 | 3.1 |
| European Union | 3.3 | 3.3 | 3.3 | 3.4 | 3.5 | 3.4 | 3.4 |
| Latin America & Caribbean | 2.5 | 2.7 | 2.7 | 2.8 | 2.7 | 2.7 | 2.7 |
| Middle East & North Africa | 2.7 | 2.8 | 2.8 | 2.8 | 3.0 | 2.7 | 2.8 |
| South Asia | 2.3 | 2.6 | 2.6 | 2.7 | 2.7 | 2.5 | 2.6 |
| World | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 2.8 | 2.8 |

Source: World Bank LPI Database

**Table 13.9** LPI: efficiency of customs clearance process (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 |
| East Asia & Pacific | 2.8 | 2.8 | 2.9 | 3.1 | 3.0 | 3.0 | 2.9 |
| Europe & Central Asia | 2.9 | 2.9 | 3.0 | 3.1 | 3.0 | 3.0 | 3.0 |
| European Union | 3.2 | 3.2 | 3.2 | 3.4 | 3.4 | 3.3 | 3.3 |
| Latin America & Caribbean | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 |
| Middle East & North Africa | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.5 | 2.6 |
| South Asia | 2.1 | 2.2 | 2.5 | 2.5 | 2.4 | 2.3 | 2.3 |
| World | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |

Source: World Bank LPI Database

**Table 13.10** LPI: timeliness of shipments (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.8 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| East Asia & Pacific | 3.4 | 3.6 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Europe & Central Asia | 3.5 | 3.7 | 3.5 | 3.7 | 3.6 | 3.6 | 3.6 |
| European Union | 3.9 | 3.9 | 3.8 | 4.0 | 4.0 | 3.9 | 3.9 |
| Latin America & Caribbean | 3.0 | 3.4 | 3.1 | 3.1 | 3.1 | 3.0 | 3.1 |
| Middle East & North Africa | 3.1 | 3.4 | 3.2 | 3.2 | 3.3 | 3.2 | 3.2 |
| South Asia | 2.7 | 3.0 | 2.9 | 2.9 | 3.0 | 2.9 | 2.9 |
| World | 3.2 | 3.4 | 3.3 | 3.3 | 3.3 | 3.2 | 3.3 |

Source: World Bank LPI Database

**Table 13.11** LPI: quality of trade and transport-related infrastructure (1 = low to 5 = high)

| | *2007* | *2010* | *2012* | *2014* | *2016* | *2018* | *Average* |
|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | 2.1 | 2.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 |
| East Asia & Pacific | 2.9 | 2.9 | 3.0 | 3.2 | 3.0 | 3.1 | 3.0 |
| Europe & Central Asia | 3.0 | 3.0 | 3.2 | 3.2 | 3.2 | 3.1 | 3.1 |
| European Union | 3.3 | 3.3 | 3.4 | 3.5 | 3.5 | 3.5 | 3.4 |
| Latin America & Caribbean | 2.4 | 2.5 | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 |
| Middle East & North Africa | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 2.7 |
| South Asia | 2.1 | 2.1 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 |
| World | 2.6 | 2.6 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 |

Source: World Bank LPI Database

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CHAPTER 14

# Trade Liberalization and Economic Growth

*Peter Quartey, Lakshmy Subramanian, and Daniel Osarfo*

## 14.1 Introduction

According to IMF and World Bank research, the slow economic growth in many developing nations may have been caused by trade restrictions or by the absence of a current trade liberalization plan (Rose, 2004). However, the empirical research on the effects of trade liberalization on economic growth is largely contradictory and ambiguous (Bhattacharyya, 2012; Rodriguez & Rodrik, 2000). Even from a theoretical point of view, there is no clear evidence of the advantages of trade liberalization. According to Rodriguez and Rodrik (2000), trade liberalization may boost global output, but not necessarily the output of all nations, given the endogenous growth model assumption. Although short-term impacts are viable, the lifting of trade restrictions should not have a lasting impact on long-term economic growth, according to classical growth models, under the premise of continuous returns to scale (Krugman & Obstfeld, 2009; Salvatore, 2019). To fully understand the connection between trade liberalization and economic growth, more research is necessary given the inconclusive character of both the theoretical and empirical evidence.

In light of this, this study examines the potential relationship between trade liberalization and economic growth using a large panel dataset from seven

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_14

regions: East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), the Middle East and North Africa (MENA), South Asia (SAS), sub-Saharan Africa (SSA), and North America (NAM). In addition to using a panel data approach, we add to the literature by estimating the association between trade openness and economic growth using a number of indicators of trade liberalization. We employ three different trade liberalization indicators following the literature: tariffs, real effective exchange rates, and adjusted trade ratios (TRs; David, 2007; Wacziarg & Welch, 2008; WTO, 2015, Manwa et al., 2019). To gauge the relationship between trade liberalization and economic growth, we review the literature on how alternative trade liberalization indicators affect economic growth. We then graphically examine the relationship between each of the indicators and growth in the seven regions.

The rest of the chapter is organized as follows. The three trade liberalization indicators are thoroughly examined in Sect. 14.2. Section 14.3 discusses the trade policies that have occurred in the six regions and presents figures that show the association between the liberalization of trade and economic growth. Section 14.4 discusses the conclusions and recommendations.

## 14.2 Literature Review

Despite the claims made in international trade theory, empirical research has not yet been able to demonstrate results that are categorically favorable when looking at how trade liberalization affects economic growth (Anderson & Neary, 2003; Bhagwati & Srinivasan, 2002). The use of various trade liberalization metrics could be one factor contributing to the inconsistent nature of the existing empirical findings. In this section, we discuss three indicators of trade liberalization and how they may affect economic growth.

### *14.2.1 Tariffs*

Tariffs (T) are defined by the World Trade Organization (WTO) as import-based customs duties that benefit domestic producers and increase government revenue (WTO, 2015). Since they are the most direct of all measures and typically have data available, tariffs are favored or preferred indicators of trade restriction. Different classifications of tariffs can result in vastly varying amounts of protection. When most of a country's trade is for low-tariff commodities, a few items with high rates will exaggerate the level of protection provided (Anderson & Neary, 2003). An alternative measure that bases only the average rate on the proportion of imports in the trading basket is the trade-weighted average tariff (Harrison, 1996). Due to elasticity, goods with extremely high tariffs are often not traded, and hence this indicator tends to underestimate the actual tariff rate (Yanikkaya, 2003). Using data from Jamaica, Kenya, and Pakistan, Pritchett and Sethi (1994) draw the conclusion that the interpretation of the protection provided by tariffs is unclear due to the weak link between collected and official tariff rates.

According to Wacziarg (2001), a more accurate indicator of the effects of tariffs is the split between import duty revenues and overall import revenues. The composition of imports, he contends, weights import duty measures even though the majority of published direct measurements of tariffs typically consist of unweighted averages of tariff rates specific to commodities. He adds that import taxes are calculated based on income from collected tariffs rather than rates that have been declared or are really in place. In this study, we employ taxes on international trade to imports as a proxy for tariffs and examine its trends and co-movement with economic growth.

### *14.2.2 Adjusted Trade Ratio*

The trade ratio (TR) is the proportion of a country's total exports and imports of goods and services to its GDP (World Bank, 2014). Due to the availability of data, it has been used as a measure of trade liberalization and is a reliable indication of a country's exposure to foreign markets (Kneller et al., 2008). More competitiveness, product variety, economies of scale, and knowledge transfer are all expected to contribute to economic growth in the wake of expanded trade. As a result, faster economic growth rates are expected in countries that engage in more international trade (Dowrick & Golley, 2004). Several studies have used this indicator (Dollar & Kraay, 2004; Harrison, 1996; Yanikkaya, 2003).

However, there are many who object to the usage of trade ratios. Pritchett (1996) criticizes the use of trade ratios as a gauge of trade liberalization. He contends that trade ratios, in particular, are a poor indicator of a country's trade strategy since they frequently vary between nations for reasons unrelated to trade policy. A country with a large domestic market may have very low trade ratios, although it may be significantly engaged in the international market, while a country with limited international trade and a small domestic market may exaggerate its trade ratios. The Heckscher-Ohlin model predicts that policy considerations, such as interest rates and exchange rates, geographic characteristics, such as a country's population and land mass, and other natural endowments will all be considered when calculating the adjusted trade ratio (ATR). By measuring the ratio of total commerce to GDP as a function of country population, size, transportation costs, and GDP per capita, Pritchett (1996) developed the adjusted trade ratio indicators. He then used the residuals from the associated regressions to estimate adjusted trade ratios and reflect the degree of distortion in recorded trade ratios. Similar methodologies are used by Frankel and Romer (1999) and Irwin and Terviö (2002), presuming that a country's geographic characteristics have an impact on trade with other nations but are unrelated to other factors that affect income. They evaluate how trade ratios affect national income using geographic factors as instrumental variables. The gravity model of trade was used by Spilimbergo et al. (1999) to determine trade ratios as a function of population, distance from major markets, income, and factor endowments.

This study creates an adjusted trade ratio measure using a methodology similar to that used by Pritchett (1996) and Spilimbergo et al. (1999). Two phases are used to estimate the adjusted trade ratio. To determine the percentage of "distortion" in our trade ratios, we first estimate a model like Pritchett's (1996) and predict the residuals from this model. In order to estimate an adjusted trade ratio, we multiplied the actual value of our trade ratios by the "residuals" from the first stage.

### *14.2.3 Real Effective Exchange Rate*

The real effective exchange rate (REER) is the weighted average real exchange rate, which gauges the value of a nation's currency in relation to its major trading partners (Darvas, 2012). It is weighted in accordance with how important a country's trading partners are in relation to its GDP. With 100 serving as the equilibrium number, it is described as an index. Because it takes into account the relative prices of non-tradable goods and tradable merchandise, the REER is, therefore, an alternate approach to analyzing a country's actual competitiveness against its trade partners (Edwards, 1989).

When established conditions in a country are suitable for both internal and external equilibria, the REER, which measures competitiveness, is in equilibrium. An appreciation of the REER suggests that domestic production costs have increased while global production costs have stayed or have been held constant when analyzing deviations from the equilibrium rate. As an alternative, a REER decline denotes a rise in domestic productivity (Edwards, 1989). By constructing indices of changes or distortions in real exchange rates, Dollar (1992) looked at the impact of price distortion on economic growth and discovered that growth in GDP per capita in emerging economies is closely correlated with these indexes. The REER's underlying principles are formed by a number of trade policy tools, according to studies by Chinn (2006), Edwards (1989), and Hau (2002). According to Baldwin (2004), there is a connection between trade restrictions and unbalanced exchange rates. In his summary of the process through which trade obstacles might result in exchange rate misalignments, Edwards (1989) focused on the bidirectional nature of the connection, that is, the possibility of transmission in both directions.

Although REER misalignment may have an impact on economic growth, according to economic theory, empirical research has not been able to agree on the short- and long-term impacts of such misalignment. Research has revealed that a nation's currency devaluation may boost economic expansion (Eichengreen, 2007; Hausmann et al., 2005; Rodrik, 2008). On the other hand, some researchers have shown no substantial effect, while others have noted a detrimental influence on economic growth (Clark et al., 2004; Doganlar, 2002; Feenstra & Kendall, 1991). We use the REER's misalignment, as a measure of distortion, to investigate the trends and co-movement in trade liberalization and economic growth in different regions.

## 14.3 Trade Liberalization in the Six World Bank Regions

In this section, we discuss how countries within the regions have pursued different trade liberalization strategies and how this has impacted their respective economies.

### *14.3.1 The East Asia and Pacific (EAP)*

The World Bank has designated the countries in Southeast Asia, East Asia, and the Pacific Islands as belonging to the EAP area. There are about 38 countries in the region, including Papua New Guinea, China, Indonesia, Japan, South Korea, Vietnam, and Thailand. The area is renowned for its quick growth in GDP, which has been fueled by elements including manufacturing that are export focused, foreign investment, and urbanization.

Prior to the 1990s, the region was characterized by high tariffs, government intervention in commerce, and non-tariff barriers. The area has subsequently adopted a number of trade liberalization initiatives, which have resulted in decreased tariffs, the removal of non-tariff obstacles, the creation of free trade agreements, and the formation of trade blocs. The creation of the Association of Southeast Asian Nations (ASEAN) Free Commerce Area (AFTA) in 1992 was one of the most important steps toward the liberalization of commerce in the EAP area. By lowering tariffs and non-tariff obstacles, AFTA aims to advance regional trade and economic integration among ASEAN members. Trade within the area has expanded since AFTA was implemented, growing from $59 billion to over $600 billion between 1990 and 2019. Since the early 1990s, a number of free trade agreements (FTAs) and regional trade blocs have been negotiated and established in the EAP area. In 2005, Brunei, Chile, New Zealand, and Singapore created the Trans-Pacific Strategic Economic Partnership Agreement (TPP), a trade pact. In 2018, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which comprises 11 nations including Australia, Canada, Japan, and Vietnam, superseded the Trans-Pacific Partnership (TPP). In 2020, the Regional Comprehensive Economic Partnership (RCEP), a grouping of 15 nations that includes China, Japan, and South Korea, was also founded; it however became effective in 2022.

Following are some particular instances of trade policy changes in the EAP region since 1990: China's WTO membership in 2001 resulted in major trade barrier reductions as well as an increase in foreign investment in the country's economy. The adoption of trade liberalization and economic reform measures in nations like Vietnam, which have boosted foreign investment and economic growth; and improvements to the region's infrastructure, logistics, and trade facilitation have lowered trade costs and facilitated economic integration. In the EAP area, trade liberalization has had a tremendous impact. Many nations in the area have seen economic development and increasing trade flows as a result of trade liberalization. The implementation of AFTA has enhanced

intra-regional commerce, which has aided in the expansion of the economy in the area. Many of the countries in the area have seen higher trade flows and economic growth as a result of the negotiating and formation of FTAs and regional trade blocs. For instance, greater trade flows between Japan and ASEAN members were the result of the 2008 adoption of the Japan-ASEAN Economic Partnership Agreement. However, there have been a variety of results from trade liberalization in the EAP region. Due to their reliance on the export of raw materials and poor institutional foundations, certain nations in the area have found it difficult to gain from trade liberalization. Concerns regarding the distributional impacts of trade liberalization have also arisen as a result of the economic power concentration in some of the region's countries but not others.

Figure 14.1 gives a graphical presentation of the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the EAP region. We observe that as tariffs are falling relatively faster, economic growth is also falling but not as fast. Concurrently, the adjusted trade ratios and the percentage changes in the REER rise steadily and marginally over the period under observation. This means that the region's engagement in the international market has been increasing on average, even as production costs in the region have increased

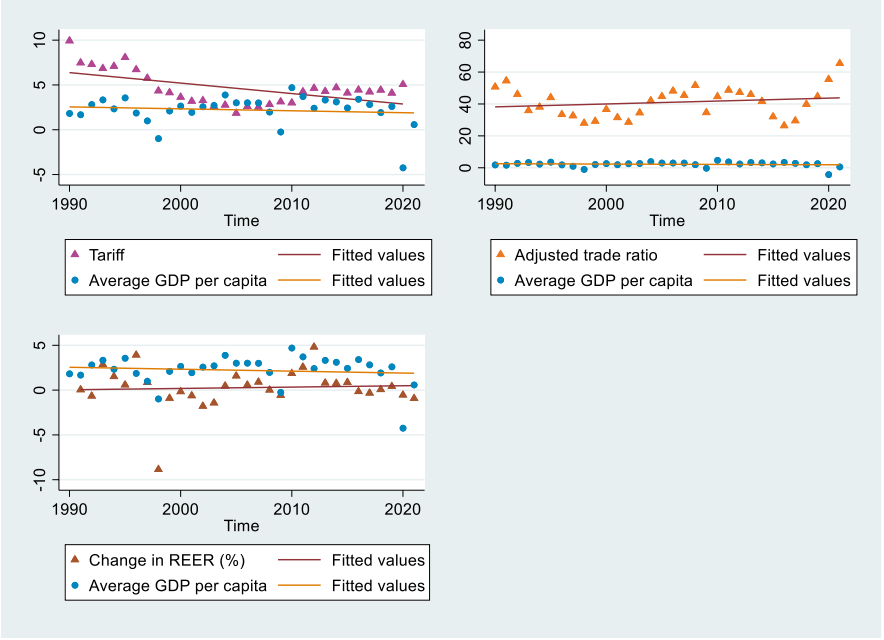


**Fig. 14.1** Trade liberalization and economic growth in the EAP region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

slightly relative to the global production costs.[1] As expected, this is mirrored by a relatively slow decline in economic growth in the region. On average, trade liberalization has not yielded the expected effect on economic growth in the EAP region.

### *14.3.2 Europe and Central Asia (ECA)*

According to the World Bank, the ECA region encompasses both European and Central Asian countries. The region is made up of 34 nations, including the Commonwealth of Independent States (CIS), Turkey, and EU member states. The ECA area includes a number of countries, including Russia, Kazakhstan, Austria, Turkey, and Uzbekistan. The economic growth of the ECA area is varied, with some nations having reached high levels of growth while others are still in the early stages. The World Bank offers assistance to countries in the ECA region in a number of areas, including reducing poverty, fostering economic growth, and preserving the environment.

Since the fall of the Soviet Union in 1991, there has been a considerable shift in the ECA area. Significant changes in trade policy and liberalization occurred simultaneously with the shift from a centrally planned economy to a market-oriented economy. The area has subsequently adopted a number of trade liberalization initiatives, which have resulted in decreased tariffs, the removal of non-tariff obstacles, the creation of free trade agreements, and the formation of trade blocs. The creation of the EU in 1993 was one of the most important advances in trade liberalization in the ECA area. Additionally, the EU has undertaken an expansion strategy that has resulted in the union of additional ECA nations. Due to the requirement that candidate countries embrace EU trade policies and measures, the EU's expansion strategy has been a driving force behind trade liberalization. Additionally, the EU has undertaken an expansion strategy that has resulted in the union of additional ECA nations. Due to the requirement that candidate countries embrace EU trade policies and measures, the EU's expansion strategy has been a driving force behind trade liberalization.

The ECA region has additionally pursued a number of regional trade agreements and trade blocs, which have resulted in the creation of free trade zones and customs unions. When the Commonwealth of Independent Republics (CIS) Free Trade Area was created in 1994, trade restrictions among its member states were eliminated. In 2015, Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan formed a customs union known as the Eurasian Economic Union (EEU). Trade barriers between EEU members have been lifted, and a single external tariff has been established. While some countries have benefited from trade liberalization, others have found it difficult to take advantage of the process. Central and Eastern European nations have witnessed greater trade flows

[1] Rising production costs in the region are most likely driven by the rising production costs in the Chinese market.

and economic growth as a result of the EU's expansion policy's considerable improvements in trade regulations and liberalization. However, due to their reliance on exporting commodities and poor institutional frameworks, some countries in the area, like Russia, have found it difficult to gain from trade liberalization.

Figure 14.2 graphically shows the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the ECA region. We observe a clear inverse association between tariffs and economic growth. At the same time, the rise in the adjusted trade ratios is mirrored by a relatively slower rise in economic growth within the period under observation in the region. Clearly tariff reduction in the ECA region has been marked by a similar proportionate growth trajectory. This growth trajectory also coincides with increased levels of engagement in the international market, which is beneficial to growth. In addition, we observe a positive association between economic growth and the percentage changes in REER. This means that although production costs in the region, relative to global production costs, have been increasing, it has had little or no reflection on the region's growth trajectory.

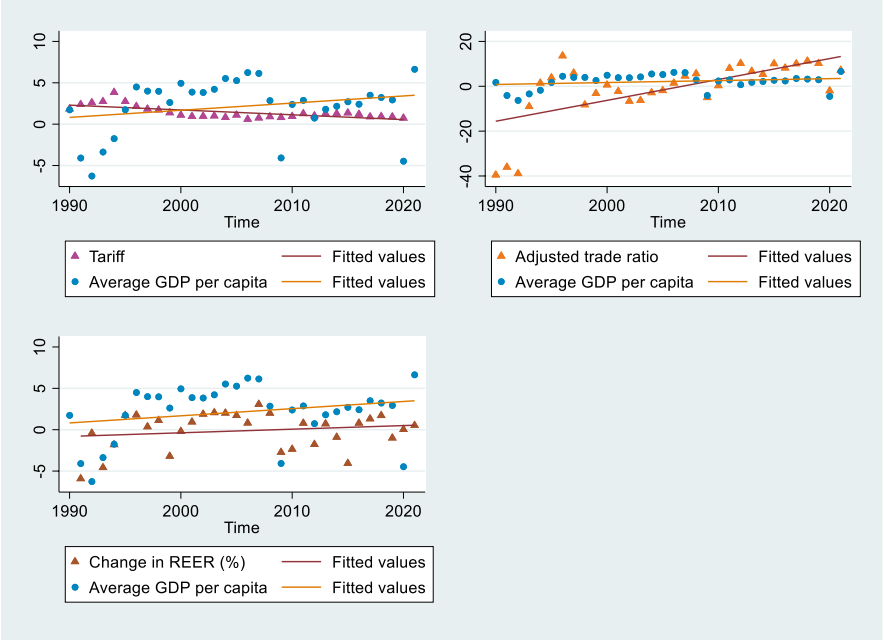


**Fig. 14.2** Trade liberalization and economic growth in the ECA region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

### *14.3.3 The Latin America and the Caribbean (LAC)*

The countries and territories that are found in Latin America and around the Caribbean Sea are collectively referred to as the LAC area. Mexico, Central America, South America, and the Caribbean islands are included in this area. The cultural richness, natural riches, and economic potential of the LAC area are well known. The economies of the nations in this area vary greatly, with some being high-income nations while others are categorized as middle or low income. The LAC area, which is renowned for its biodiversity and natural beauty, is home to a range of habitats, including deserts, forests, mountains, and coastlines.

Many LAC countries have been pursuing trade liberalization policies since the 1990s, lowering tariffs and other trade obstacles and forming free trade agreements and trade blocs. A number of factors, such as the need to draw in foreign investment, the aim to diversify economies and lessen reliance on exports of commodities, and the need to adhere to international trade norms and standards, have all contributed to this tendency. The World Trade Organization (WTO), which was founded in 1995, has pushed nations to lower their tariffs and other trade restrictions in conformity with WTO regulations. The majority of the nations in the area have ratified the WTO and pledged to lower their tariffs and other trade restrictions.

For instance, Mexico implemented a number of trade liberalization reforms in the early 1990s, which included signing the North American Free Trade Agreement (NAFTA) with the United States and Canada, which has aided in boosting trade and investment flows in the area (CRS Report, 2020). Since the 1990s, the LAC area has developed a number of regional trade agreements and trade blocs in addition to the WTO. By lowering tariffs and other trade obstacles, standardizing laws, and easing the cross-border exchange of commodities, services, and capital, these accords aim to boost integration and trade among the participating countries. The Common Market of the South (Mercosur), which was founded in 1991 and encompasses Argentina, Brazil, Paraguay, and Uruguay, is one of the most effective regional trade agreements in the area. In addition to fostering greater regional integration, Mercosur has aided in boosting intra-regional commerce (The United Nations, 2014).

The Andean Community, which was founded in 1969 and consists of Bolivia, Colombia, Ecuador, and Peru; the Pacific Alliance, which was founded in 2011 and consists of Chile, Colombia, Mexico, and Peru; and the Central American Common Market, which was founded in 1960 and consists of Guatemala, Honduras, Costa Rica, El Salvador, and Nicaragua, are additional regional trade agreements and trade blocs in the LAC region. According to the El-Haddad et al. (2017), these agreements have aided in promoting trade and integration among the participating countries and have supported the region's trade liberalization trend overall. Despite the advancements achieved in the LAC region's trade liberalization, there are still major issues that need to be resolved. The lack of diversification of the economies in the region, many of

which are still reliant on exports of raw materials, is one of the key obstacles. Due to this, they are more susceptible to changes in commodity prices and are unable to compete in other areas of the global economy. Many countries in the area are adopting policies meant to diversify their economies and encourage non-commodity exports in order to deal with this problem. The sparse amount of intra-regional commerce, which continues to be far lower than levels observed in other parts of the world, is another difficulty for the LAC region. This is partially a result of the poor infrastructure and expensive transportation, which make it challenging for commodities to traverse international boundaries. There is a need for increased investment in transport infrastructure, as well as for policies that aim to lessen non-tariff trade barriers, in order to solve this problem.

Figure 14.3 gives a graphical presentation of the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the LAC region. We observe from the fitted values that economic growth fell steadily between 1990 and 2021. This was mirrored by a much faster fall in tariffs and the adjusted trade ratios. That is, although tariffs have been on the decline, the region's engagement on the global market has also reduced even faster. The association between growth and percentage changes in REER is not that conspicuous.

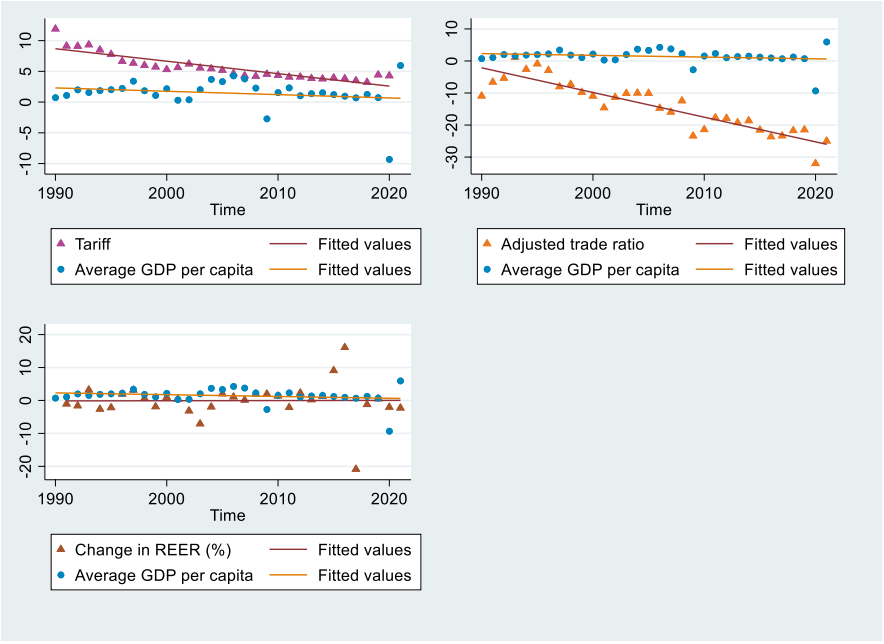


**Fig. 14.3** Trade liberalization and economic growth in the LAC region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

### *14.3.4 The Middle East and North Africa (MENA)*

The MENA region is a geographical area that stretches from Morocco in the west to Iran in the east. Due to its long history, variety of cultures, and advantageous location, the region has historically served as a major hub for commerce, migration, and warfare. Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, the United Arab Emirates, and Yemen are a few of the nations in the MENA region. In the MENA area, several nations have adopted trade liberalization policies, cut tariffs and other trade restrictions, and created free trade agreements and trade blocs. The need to diversify economies and lessen reliance on oil exports, the need to draw in foreign capital, and the pressure to adhere to international trade laws and regulations are just a few of the drivers that have fueled the current trend. The World Trade Organization (WTO) has been one of the primary forces behind trade liberalization in the MENA area. The majority of the countries in the region have ratified the WTO's rules and pledged to lower their tariffs and other trade restrictions.

The growth of regional trade blocs and agreements has been a significant influence promoting liberalization of trade in the MENA region. By lowering tariffs and other trade obstacles, standardizing laws, and easing the cross-border exchange of commodities, services, and capital, these accords aim to boost trade and integration among the participating countries. The Greater Arab Free Trade Area (GAFTA), which was founded in 1997 and includes 17 Arab League nations, is one of the earliest and most well-established regional trade accords in the MENA area. GAFTA has paved the way for deeper regional integration and increased intra-regional commerce (Rouis & Tabor, 2012). Other regional trade agreements and trade blocs have been formed in the MENA region in addition to GAFTA, such as the Agadir Agreement, which includes Morocco, Tunisia, Egypt, and Jordan (signed in 2004); the Arab Maghreb Union (AMU), which was set up in 1989 and includes Algeria, Libya, Mauritania, Morocco, and Tunisia; and the Gulf Cooperation Council (GCC), which was established in 1981 and includes Bahrain, Kuwait, Oman, Qatar, and Saudi Arabia. These accords have contributed to the region's general trend of trade liberalization by fostering trade and economic cooperation among member nations.

Despite the advancements achieved in the MENA region's commercial liberalization, there are still major issues that need to be resolved. The lack of economic diversification among several of the region's countries, many of which are still reliant on oil exports, is one of the key challenges. Due to this, they are more susceptible to changes in oil prices and are unable to compete in other areas of the global economy. A number of countries in the area are implementing measures to diversify their economies and encourage non-oil exports to solve this problem. The low level of trade within the region, which continues to be far lower than levels found in other parts of the world, is another difficulty for the MENA region. This is partially a result of the lack of trade and

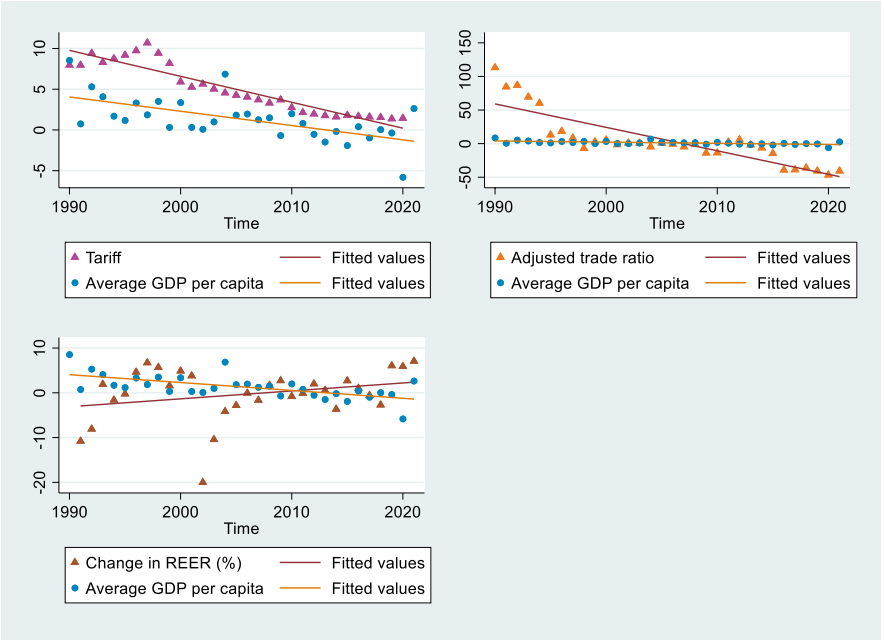


**Fig. 14.4** Trade liberalization and economic growth in the MENA region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

economic cooperation among some of the countries in the region as a result of political tensions and wars. More regional integration, collaboration, and policies aiming at lowering non-tariff trade barriers are required to overcome this challenge.

Figure 14.4 graphically shows the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the MENA region. We observe that economic growth has been declining, on average, between 1990 and 2021. It is clear that as the per capita growth rate has been falling, tariffs have also been on a downward trend. This means that tariff reduction is inversely associated with economic growth within the region. Concurrently, the region has witnessed a relatively faster fall in the adjusted trade ratios in the period under observation, indicating much-reduced engagement on the global market relative to the domestic market. We also observe an inverse association between economic growth and the percentage change in REER, reflecting rising production costs in the region.

### *14.3.5 South Asia (SAS)*

The SAS region is the most densely populated in the world with a population of more than 1.8 billion. The area is known for its extensive cultural variety,

which includes a wide range of languages, faiths, and traditions. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka are a few of the countries that make up South Asia.

Many nations in the SAS area have adopted trade liberalization policies since the early 1990s intending to lower trade barriers and foster economic growth through expanded international trade. To liberalize trade and investment, India has been at the heart of this movement, enacting a number of economic changes. Although development has been unequal between nations, other nations in the area, including Bangladesh, Pakistan, and Sri Lanka, additionally pursued trade liberalization policies. India started implementing trade liberalization measures in 1991 when the nation was experiencing a serious economic crisis. The administration put into place a number of changes, such as lowering trade barriers and privatizing state-owned businesses, to liberalize the economy and support international commerce. With the help of these changes, foreign investment and trade significantly increased, and between 1994 and 2014, India's economy grew at an average annual rate of 7%.

The lowering of taxes on imported products was one of India's key trade liberalization strategies. India had one of the highest average tariff rates in the world in 1991, hovering around 80%. With an average tariff rate of about 7.5% by 2018, India has become one of the most open countries in the world. As a result of the removal of trade obstacles, global commerce has increased, with the value of India's exports increasing from $18.7 billion in 1990 to over $330 billion in 2020. In an effort to boost trade and integration in the region, India has also explored regional trade agreements. India joined the South Asian Association for Regional Cooperation (SAARC) as a founding member in 1995. A regional group called SAARC works to advance economic integration and cooperation in South Asia. To lower tariffs and foster intra-regional commerce, SAARC formed the South Asian Free Commerce Area (SAFTA) in 2004. However, the implementation of SAFTA has been sluggish, and many countries in the area continue to face severe trade restrictions.

Although development has been unequal between nations, other South Asian nations have also embraced trade liberalization policies. Bangladesh has enacted a number of changes, such as the creation of export processing zones and the lowering of import duties, aimed at fostering global commerce and luring foreign investment. As a result of these measures, global commerce has significantly increased, with Bangladesh's exports rising from $1.3 billion in 1990 to $38.7 billion in 2020. Pakistan has also put in place a number of trade liberalization initiatives, such as lowering import tariffs and privatizing state-owned businesses. As a result of these measures, global commerce has increased, with Pakistan's exports rising from $3.5 billion in 1990 to $25.3 billion in 2020. Pakistan still encounters substantial trade obstacles, such as high tariffs and non-tariff barriers. In order to promote international commerce while still preserving native sectors, Sri Lanka has adopted a more gradual strategy for trade liberalization. A number of regional trade blocs with the goal of fostering trade and economic integration have also been formed in the South Asian area.

In addition to SAARC and SAFTA, the Indian Ocean Rim Association (IORA) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) have contributed to regional trade and economic integration. However, implementation of regional trade agreements has plodded along, and the area still faces formidable obstacles in competitiveness, trade diversification, and economic integration.

Figure 14.5 gives a graphical presentation of the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the SAS region. We observe from the fitted values that economic growth fell at a slow rate between 1990 and 2021. During this time, tariffs in the region fell at a faster rate; the region's level of participation in the international market also reduced, albeit at a slower rate between 2004 and 2021. Thus, the tariff reduction recorded in SAS countries has not propelled increased global market participation compared to intra-regional trade. In addition, we observe an inverse association between economic growth and the percentage changes in REER. This means that the production cost in the region, compared to the global production cost, has been rising.

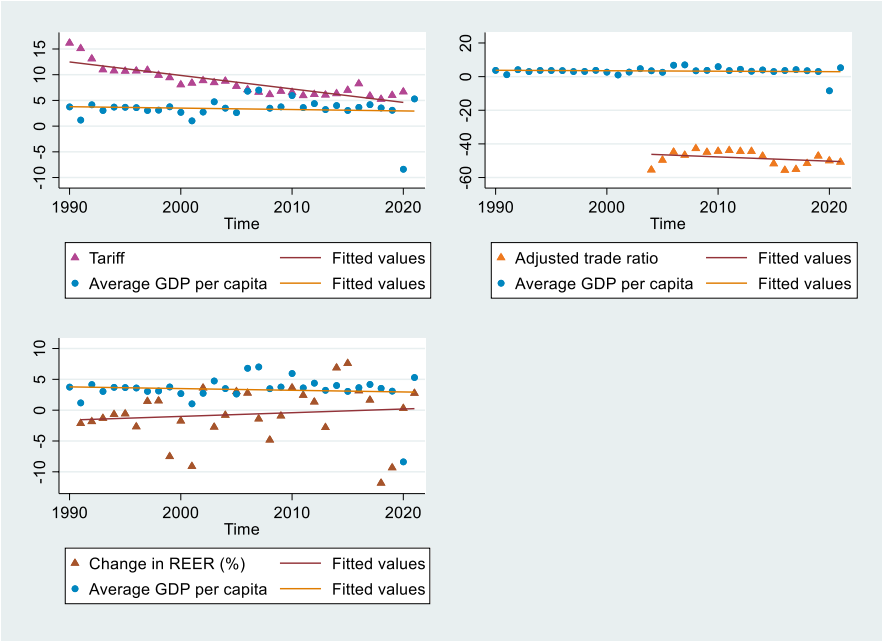


**Fig. 14.5** Trade liberalization and economic growth in the SAS region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

### *14.3.6 Sub-Saharan Africa (SSA)*

All of the countries in Africa south of the Sahara desert are together referred to as the SSA area. From the southernmost point of Africa to the northern Sahel area, it consists of 46 different countries and territories. The area is renowned for its vast natural resources, including minerals, oil, and agricultural land, as well as its cultural and linguistic variety. With a population of over 1 billion, the area has a broad economy that includes a mix of industry, services, agriculture, and mining. But the area deals with serious problems including poverty, political unrest, and health problems like malaria.

SSA countries have adopted trade liberalization policies, lowering tariffs and other trade obstacles and forming free trade agreements and trade blocs. The motivation behind this has been a desire to boost economic development, alleviate poverty, and join the global economy. Both domestic and foreign causes have contributed to the liberalization of trade in the area. Many of the countries in the region have internally acknowledged the need to diversify their economies, lessen their reliance on commodities export, and increase their competitiveness. The rise of non-traditional exports, including processed foods, textiles, and services, as well as an emphasis on export-oriented growth strategies has resulted thusly. The creation of regional trade blocs and agreements has been one of the primary drivers behind the liberalization of trade in the area. Two regional trade organizations, the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC), have played a key role in advancing regional trade and economic integration in the area.

In addition to implementing a unified external tariff, ECOWAS is striving to create a regional customs union. However, the implementation of regional trade accords has plodded along, and the area still faces formidable obstacles in terms of trade diversification, competitiveness, and economic integration. Additionally subject to outside shocks like changes in commodity prices, the region also suffers considerable non-tariff barriers to trade including shoddy infrastructure and corruption. Despite these difficulties, many countries in the area have achieved substantial strides toward increasing economic integration and trade liberalization. For instance, Ghana pursued a number of economic reforms, including tariff reductions, deregulation, and privatization, to liberalize trade and investment. This encouraged economic growth and drew in foreign investment. In a similar vein, Kenya has carried out a number of economic reforms to liberalize trade and investment, such as the creation of a free trade zone and the deployment of other trade facilitation measures. This has encouraged economic growth and drawn in foreign investment.

Figure 14.6 graphically shows the association between economic growth (growth rate of per capita gross domestic product) and the three measures of trade liberalization in the SSA region. We observe from the fitted values that economic growth has neither been falling nor rising within the period under observation. Indeed, although tariffs have been falling and trade ratios have

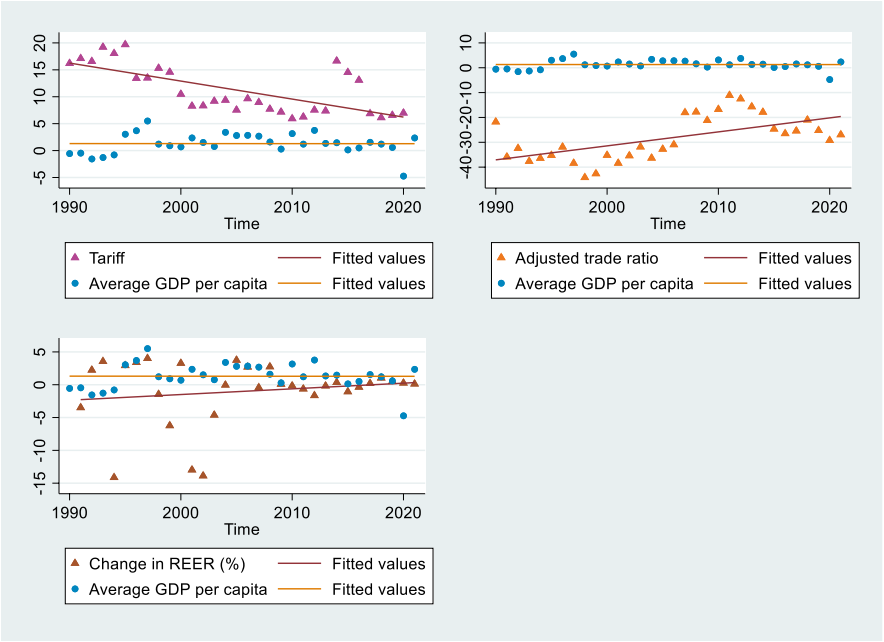


**Fig. 14.6** Trade liberalization and economic growth in the SSA region (1990–2021). (Source: Author's construction using data from Penn World Tables and World Bank Development Indicators)

been rising in the SSA region, no clear association with economic growth can be visualized. In addition, we observe an inverse association between economic growth and the percentage changes in REER. The region has, to a large extent, liberalized trade by reducing tariff levels and increasing their global market participation, although they produce at a higher production cost.

## 14.4 Conclusion and Recommendations

Theoretically, trade liberalization should propel economic growth as the more open country should have access to a larger market for its products and raw materials alike. However, empirical evidence is unable to bear out such a relationship. Indeed, different regions of the world have different structural and logistical capacities to take advantage of the evolving nature of trade and the development of global value chains. This chapter sought to throw more light on the linkage between trade liberalization and economic growth in EAP, ECA, LAC, MENA, SAS, and SSA. We found a reducing trend of tariffs in all the regions. In addition, trends in the adjusted trade ratios showed that countries in the EAP, ECA, and SSA have experienced more global market participation, compared to their domestic participation, whereas the average global market participation of LAC, MENA, and SAS has been declining. Also, we

saw that the average production cost for countries in ECA, MENA, SAS, and SSA has been on an upward trend, a situation that would likely make products from these regions uncompetitive as prices would be higher compared to the regions with lower production costs.

Tariff reductions have not coincided with growing global market involvement in all regions. Alternate frameworks that policymakers could take into account include supporting global value chains in industries where the regions have a competitive advantage, building regional human capital, and creating meaningful private sector business networks. Further enquiries on the peculiar nature and structure of the production cost in each region will help devise strategies to reduce production costs; this will encourage higher levels of engagement in global value chains and contribute to making them more competitive.

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CHAPTER 15

# Services-Led Development as an Option for Africa

*Federico Foders*

> His home is Bungoma, a small town in western Kenya, but his workplace is the world. (The Economist, 2023)

## 15.1 Introduction

Since the inception of the General Agreement on Trade in Services (GATS) in the 1990s services have been continuously expanding as a share of employment, production, investment and trade in the world economy. Technological advances, the process of globalisation and multilateral as well as regional liberalisation of capital and trade flows have facilitated the transformation of world production and trade. Both offshoring and global value chains (GVC) greatly benefited from these developments. Despite some geopolitical events that threatened to jeopardise the multilateral trade system, the diffusion of breakthroughs in digitalisation enabled both developing and developed economies to increase their cross-border exchange of services.

In 2020 the African Union (AU) published 'The Digital Transformation Strategy for Africa' encouraging its member countries to embark on a transition

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_15

towards a digitalisation of their economies.[1] A number of African countries already engaged in digital entrepreneurship since the turn of the century are currently striving to reap gains from trade and investment in digital services with a development perspective.[2] This begs the question whether the growing importance of services in the world economy may be taken as a rationale for a revision of received development strategies to include the tertiary sector. Could the service sector complement received development strategies in a way that it confers on participating countries an advantage over countries adhering to traditional policies focusing on the primary and secondary sectors in order to converge in the long run to the levels of GDP per capita of more advanced countries? It is the purpose of this essay to shed some light on this theme.

First I take stock of global and regional services trade and technological progress in Africa. Second, I turn to fundamental issues in productivity and employment related to services. Third, the idea that global value creation is shifting from physical to human capital and intellectual property is discussed under the expectation that such a shift could create unexpected employment and income opportunities in African countries. Finally, services-led development is explored as a complementary option to an agriculture or mining and especially manufacturing-led development strategy.

## 15.2 Taking Stock of Services Trade

World trade and investment have both been adversely affected by the Great Recession in the wake of the financial crisis 2007–2009, by the pandemic and, more recently, by the conflict in the Ukraine. Despite these severe shocks, the growth rates of trade in services and service-related capital flows have been exceeding the growth rates of global goods trade and total capital flows since 2011.[3] While in 2021 global trade amounted to US$ 27.4 trillion, trade in commercial services (transport, travel, other services (incl. computer services)) reached a level of US$ 5.8 trillion or 21.2% of total trade value.[4]

Commercial presence (mode 3 of GATS entailing the supply through foreign affiliates of multinational enterprises) is currently the dominant mode for world services exports and imports.[5] For the purpose of this essay, however, I will focus on mode 1, which ranks only second after mode 3 in the statistics. Mode 1 refers to cross-border supply, that is, when a supplier (a natural or juridical person) in country A delivers a product to a user (a natural or juridical person)(B2C or B2B)[6] in country B. Neither the supplier nor the user receiving the service needs to change location for this international trade transaction

[1] African Union (2020).

[2] On this see Graham (2019), Taura et al. (2020) and Friederici et al. (2020).

[3] See UNCTAD (2022a) and WTO (2022).

[4] See WTO (2022). On the economics of trade in services see Francois and Hoekman (2010) and Hoekman (2018).

[5] For the characteristics of the different modes of supply under GATS see, for example, Rueda-Cantuche et al. (2016).

[6] Business to consumer or business to business.

to take place. Set in a digital frame, an intermediate or final digital service (a code, online content, a mobile application, a software or parts thereof, a product design, a marketing strategy, a R&D report, an engineering drawing or plan, an accounting or auditing report, etc.) is being sent by email (or any other electronic means) by the supplier in one country to the user in another country who receives the product by email (or any other electronic means).[7] In this example the economic transaction consists of trade in a digital service produced domestically, a portion of which is channelled through foreign trade to meet the demand of clients in a foreign country. The same service can also be readily provided to the domestic market (as an intermediate or a final service to local users). By restricting the analysis to mode 1, structural change in services trade occurring in the wake of digitalisation, we take into account that the use of new technologies can be associated with increases in mode 1 trade resulting from trade in modes 2, 3 and 4 shifting partially to mode 1.[8]

Global digitally delivered services exports through mode 1 reached US$ 3.71 trillion or 64 % of commercial services trade in 2021.[9] During the period 2005–2021 digital services exports almost tripled and grew at an average growth rate per year of 7.3 %, thereby outpacing goods exports by far.[10] A glance at the regional distribution of commercial services exports reveals some differences between developing regions as suppliers and destinations of digital services. Before the pandemic, information and communication technology (ICT) services exports originating in Africa and in Latin America and the Caribbean amounted to 5 % of commercial services exports each, while developing Asia's share was 12 %.[11] Digitally deliverable services as a percentage of commercial services exports from Africa reached 25 % in 2019, whereas Latin America and the Caribbean and developing Asia accounted for 30 % and 42 %, respectively.[12]

## 15.3 Regional Trade and Digitally Deliverable Services

Technological change has clearly transformed how services can be supplied which is why services present new challenges to the multilateral trade system. In December 2021 members of the WTO agreed to a joint initiative on

[7] Instead of sending the product by email, both traders could be sharing a common drive in the cloud or some other digital infrastructure. To connect with each other and discuss the transaction and exchange pre-transaction and after-sales information both may log in to digital platforms featuring video, audio, phone and chat options using appropriate devices. Basically, connectivity for digital services trade assumes the availability of access to the internet through fixed line, broadband coverage, satellites or mobile phones. On technical details see International Telecommunications Union (2022) and (2023).

[8] See UNCTAD (2022b).

[9] See WTO (2022).

[10] See WTO (2022).

[11] See UNCTAD (2022b).

[12] See UNCTAD (2022b).

regulation of services trade touching upon topics such as tariffs, non-tariff barriers, data flows, source codes, consumer protection and cybersecurity.[13] At the regional level many trade agreements have contributed to liberalise services trade. The African continent is one of the developing areas with a long history of integration initiatives with different arrangements (economic communities, customs unions, free trade agreements). The existing initiatives have been complemented since 2021 by the African Continental Free Trade Area (AfCFTA) for all members of the AU, as part of the latter's Agenda 2063 and with an emphasis on services trade liberalisation. The AfCFTA prioritises transport, tourism, financial services, communications and business services, with the last-mentioned category including digitally deliverable services.[14]

The promotion of intra-regional trade in Africa is particularly important given the foreign trade structure the region inherited from colonial times. Of Africa's total international trade only 11 % of exports and 10 % of imports derived from intra-regional trade in 2018; the rest, that is, the bulk of Africa's trade, took place with extra-African trade partners, especially with the European Union (EU) and China.[15] Services amounted to only 3 % of total African foreign trade. More than 60 % of African exports (including intra-African trade) consist of raw materials and minerals. Almost 61 % of imports from the European Union, 57 % of imports from China as well as 41 % of imports from the rest of the world comprise industrial goods.[16] One of reasons for this trade pattern is that African countries benefit from preferential agreements with the EU, China and the US. This somewhat skewed regional trade structure and composition has hardly changed since 1995. Therefore, a strengthening of intra-African trade and a diversification of production and trade are both high on the trade policy agenda for Africa.

In the long run the AfCFTA faces several challenges: will it be able to reverse the structural trend of Africa's production and trade? And how compatible is it with existing regional integration initiatives? Both questions seem to be closely related to each other. An intensification of intra-African trade is only viable if existing barriers to trade can be removed.[17] Of 54 AU member countries 47 belong to at least one of the existing regional integration initiatives (8 regional economic communities, 4 customs unions and 3 free trade agreements).[18] Since rules of origin are one of the main policy instruments used to implement the existing initiatives, it can be predicted that the administrative burden of intra-African imports and exports is very likely to increase in the future. For example, if individual countries belonging to one of the old agreements should seek to foster trade with neighbouring countries participating in any other of

[13] See UNCTAD (2022b).

[14] See UNCTAD (2022b). Other services sector included in GATS shall be negotiated later (education, health, social, environmental, distribution and construction).

[15] Böschemeier et al. (2022).

[16] Böschemeier et al. (2022).

[17] See, for example, Baccini et al. (2021) and Visagie and Turok (2019).

[18] Böschemeier et al. (2022).

the old initiatives exporters and importers will have to bear high trade costs. Jagdish Bhagwati (1995) once coined the expression 'spaghetti bowl' to denote a situation in which overlapping agreements with different rules of origin tend to complicate and thus largely restrict trade instead of facilitating it. A mounting administrative burden may not only reduce the opportunities for legal trade among African countries but also create incentives for illegal and informal cross-border trade.[19]

Other sources of trade restrictions affecting services tend to increase trade costs of services over and above those for goods trade, too. The WTO estimates trade cost components (information and transaction costs, trade policy, regulatory differences, technology, transport costs and the quality of governance) and concludes that they are highest among developing countries and between developing and advanced countries.[20] With respect to mode 1 which benefits significantly from digitalisation, behind-the-border regulatory measures such as the mutual recognition of professional certificates issued in African countries and data protection standards play a role in cases in which digital services such as auditing, accounting, legal, engineering and other business services are transmitted electronically. Furthermore, for mode 1 the choice of the trade partner is also dependent on the infrastructure existing in the importing countries, especially on ICT connectivity and penetration, as reflected in business portals and online labour market platforms accessed to search for potential importers and hiring professionals. While technical progress in the area of digitalisation generally benefits total trade it turns out to be a true blessing for trade in digital services.

According to the WTO and the World Bank's joint services trade restrictions (STR) database for 2016, the STR index for world services trade shows protection in the following sectors of mode 1 delivery: legal (40/100), auditing (65/100), accounting (52/100), financial (65/100) and insurance (62/100).[21] Small and less productive and experienced firms are particularly vulnerable to the measured trade restrictions. A second STR index referring exclusively to digital services trade reveals that protection increased between 2014 and 2018 due to several factors, one of them being the degree of data regulation (usage and cross-border movement of data) which—as regulation generally does—differs from country to country. The indication is that the African regional trade agenda will have to include regulatory divergence at the national level as a target for harmonisation negotiations, thereby helping to ensure a smooth flow of services trade and related investment among African countries.

[19] Smuggling of illegal goods and services (illegal trade) and evasion of customs duties and regulations affecting legal goods and services (informal trade).

[20] WTO (2019a).

[21] WTO (2019a). The WTO and World Bank joint database covers 34 service sectors in 129 countries, including most AU member countries. The STRI ranges from 0 (open) to 100 (closed) (i-tip.wto.org/services/default.aspx). Although it still is difficult to find reliable data on trade barriers exclusively for digital trade, the digital STRI ranging from 0 to 1 constitutes a very helpful statistic to broaden the digital database.

The East African Community (EAC) is one of the regional integration initiatives that gathered significant experience in liberalising services trade. The five member countries committed to liberalise a number of subsectors across all modes of supply by end-2015.[22] In addition, the group agreed to abstain from introducing new barriers to trade. While Kenya was prepared to keep 63 subsectors open for trade, Uganda did so for 98 subsectors and Rwanda for 101 subsectors.[23] Particularly Kenya under the government's 2030 Vision programme seeks to establish its capital city Nairobi as a leading financial centre in Sub-Saharan Africa and for this purpose needs to improve market access for Kenyan firms in neighbouring countries. As a member of EAC, the Common Market for Eastern and Southern Africa (COMESA), the Intergovernmental Authority on Development (IGAD) and the Indian Ocean Rim—Association of Regional Cooperation (IOR–ARC), the country has been negotiating with a large number of African countries in order to open up foreign markets for domestic service exporters. Two examples may showcase current digital entrepreneurial activity in Kenya: M-Pesa,[24] a fintech founded in 2007 as a joint venture between Safaricom (Kenya) and Vodacom (majority-owned by the Vodafone Group (UK)), offers financial services for the banked and particularly for the un- and underbanked. People living in remote areas are enabled to transfer money to and receive money from others located anywhere in Kenya and in other six African countries. Also, M-Kopa, a fintech launched in 2010 and headquartered in Nairobi caters to underbanked customers and currently operates in Ghana, Kenya, Nigeria and Uganda and shows that African digital entrepreneurship is successfully developing new markets and overcoming issues in affordability, connectivity and the supply of angel investors in African countries.

## 15.4 Digital Production and Productivity

Increasing digital services trade and related capital flows may contribute to change the composition and direction of foreign trade in Africa. In a development context it seems appropriate to go beyond trade flows and ask whether investment in ICT and digital services can also be expected to boost productivity and economic growth. Today, the indication is that the results of research on the impact of digitalisation on productivity in developing and developed countries turn out to be at most mixed, both at the macro and micro levels.[25] One of the main reasons behind the empirical challenge of identifying productivity effects of digitalisation is likely to be the difficulty to reliably measure how digital technologies translate into changes in (digital and analogue)

[22] WTO (2019b). Burundi, Kenya, Rwanda, Tanzania and Uganda are the member countries of the EAC.

[23] See WTO (2019b), Annex 2 on Kenya, and Dihel et al. (2011).

[24] M-Pesa: M for mobile and 'pesa' is Swahili for money. M-Kopa: M for mobile and 'kopa' is Swahili for borrow.

[25] See, for example, Vu et al. (2020), and Hajli et al. (2015).

output volume and quality and in productivity. Robert Solow's famous aphorism 'we see the computer age everywhere but in the productivity statistics', also known as Solow's paradox or the productivity paradox, was stated more than three decades ago[26] and seems to be still alive and well in the year 2023. Several waves of research have failed to uncover the link between ICT investment and digital production and trade on the one hand and official productivity statistics on the other. Besides the measurement issue mentioned above, latest research drawing heavily on databases at the firm level points at weaknesses in the microeconomic foundation of productivity indicators as an additional explanation for the productivity paradox.[27]

This notwithstanding, some research reports apparently find empirical evidence of the missing link between digitalisation and either productivity or growth of GDP per capita. Jorgenson and Vu (2016), for example, state that 'the contributions of ICT to economic growth are empirically measurable'[28] and suggest that there are economic policies 'that can help a nation reap more benefits from the ICT revolution'.[29] The authors conclude that the digital transformation of the firm requires appropriate measures and adjustment on the side of the government, that markets should stay open for digital solutions created in other countries, developing and developed, and that digital technologies can empower entrepreneurs in developing countries to supply digital products to the world market if their governments are willing to support them with favourable (domestic and foreign) policies and a complementary legal-institutional framework.[30]

Another strand of the literature on productivity discusses Baumol's cost disease hypothesis (Baumol, 1967; Kraemer & Hartung, 2017)), which refers particularly to services. In his seminal paper Baumol divides the economy into productive and less productive industries. According to this definition, services such as health care, education and performing arts belong to the less productive on the ground that they show persistently increasing costs (and employment) and almost no (positive) change in productivity. One of the consequences of this hypothesis is that in the process of tertiarisation occurring in most economies labour productivity and total factor productivity tend to fall in the wake of an expansion of services. If, however, an economy's labour productivity increases over time, then such a pattern is likely to be associated with either highly productive services such as finance and insurance, tourism, real estate and other digital (business) services or strong advances in manufacturing productivity or both. Even if the focus of Baumol's cost disease is laid on personal (or, as Jagdish Bhagwati called them: embodied) services which in the past were not delivered by mode 1 to foreign customers, the indication is that

[26] Solow (1987), p. 16.
[27] See Cusolito and Maloney (2018) and Brynjolfsson et al. (2019).
[28] Jorgenson and Vu (2016), p. 397.
[29] Jorgenson and Vu (2016), p. 393.
[30] Jorgenson and Vu (2016, pp. 396–397). See also Niebel (2018) and Stanley et al. (2018).

developing economies seeking to facilitate services production and trade as a complement to a development strategy based on agriculture and manufacturing should not expect services (even digital ones) to help improve average productivity significantly. That said, Solow's paradox and Baumol's cost disease contribute to dampen overblown expectations with respect to new technologies, albeit without diminishing the great potential that can be associated with ICT investments and digitalisation and an expansion of the services sector in developing countries.

## 15.5 Digitalisation and the Labour Market

With most African countries still at a relatively early stage of the demographic transition, governments are generally struggling to increase employment opportunities and thereby reduce unemployment. In the past development policies related to agriculture and manufacturing have more often than not attracted capital-intensive technologies that generated formal employment only for a very limited number of workers; subsistence farming is still widespread. Both formal and informal unemployment and underemployment are common in many African countries. Moreover, highly qualified workers do not always succeed in finding appropriate employment; they are compelled to consider the option of emigrating to other African countries or other regions when looking for a positive return on their investment in human capital. Unskilled workers migrate from rural to urban areas and mining sites searching for informal or formal employment. For African countries to reap a demographic dividend by taking advantage of population growth to spur economic growth new employment opportunities are urgently required. This raises the question whether investments in digital services and the rest of the service industry could contribute to supply at least an important share of the required employment opportunities over a wide range of qualifications.[31]

The services sector has grown quite fast in the world economy over the last three decades with African countries being no exception to this trend. Although a few countries like Sudan present only a very small services sector as a share of GDP (under 10 %), Djibouti's service sector accounts for as much as 77.27 % of GDP, South Africa's for 62.75 % and Liberia's for 37.04 % (data for 2020).[32] Considering that all countries mentioned above have informal sectors, the actual share of services in the economy should be much higher already. Furthermore, in most African countries the share of services in GDP is likely to be higher than the one of manufacturing. Agriculture, often in the form of subsistence farming, is the only sector directly competing with services. However, due to the fact that employment in agriculture is limited by the supply of agricultural land, which—as climate change unfolds—is expected to

[31] See UNCTAD (2019) and Wamboye and Nyaronga (2019).
[32] Statista (2023).

decrease further in the future, the services sector seems to be the only one with a high potential for job creation.

An issue to be addressed at this point is the substitution of production factors in the services industry in the wake of technical progress. Two strands of the literature seem to be relevant here. One of them is represented by a paper by Acemoglu (2002) on directed technical change which argues that one of the reasons for labour redundancy as a consequence of technical progress is that the latter may be either skill biased or capital biased and in both cases rather unfavourable for unskilled labour. The other strand of the literature is the one focusing on tasks instead of jobs. The approach by Acemoglu and Restrepo (2018) differs 'from models of directed technological change based on factor-augmenting technologies' and moves to a task-based framework. It 'implies that as a factor becomes cheaper, this not only influences the range of tasks allocated to it, but also generates incentives for the introduction of technologies that allow firms to utilize this factor more intensively. Thus, 'by reducing the effective cost of labour in the least complex tasks, automation discourages further automation'. Furthermore, new tasks are created in the process with workers having a motivation to shift to the new tasks if firms supply the necessary training and learning-on-the-job opportunities. Therefore, the indication is that in the task-based framework skill-biased technological progress tends to dominate the factor substitution effect so that digitalisation and ICT investments in African countries are very likely to be complementary to services provided by skilled labour, which in turn may be supported by low-skilled labour.[33]

## 15.6 The Promise of Digital Technical Change

Back in the 1970s the manufacturing industry in developed countries reached its highest level as a share of GDP. Since then, most advanced countries experienced different degrees of de-industrialisation. At the same time, value creation gradually began to shift from capital to human capital and intellectual property and to new business models which were enabled by technical progress. An increasing number of manufacturing tasks were automated as a response to higher real wages. Digital technologies made the establishment of global value chains through unbundling and offshoring feasible and globalisation expanded fast in the 1990s, particularly in the US, Europe and Asia, taking advantage of low-cost labour in developing Asia. The commodity boom that ensued in the 2000s benefited resource-rich emerging countries. At the same time, the next wave of diffusion of digital technologies extended to less-developed regions. These developments led to Baldwin's (2016, 2019) and Baldwin and Forslid's (2019) informed conjecture that emerging and advanced countries are both experiencing a comprehensive transformation of production and trade driven by robotics and digital technologies which are very likely to disrupt the received division of labour in the world economy. In this spirit,

[33] See also Acemoglu et al. (2020), Shiller (2019) and Lanz et al. (2011).

employment in developed economies, which is already heavily biased towards services, is predicted to deepen and move to so-called sheltered (i.e. protected) services, while developing countries are expected to allocate their resources (low-cost skilled and unskilled labour and ICT investments) increasingly to export-oriented (digital) services. In this way, structural change would reduce manufacturing's employment potential on a global scale, thereby rendering labour-intensive manufacturing largely obsolete as a path to economic growth and development following China's example.

Although China is also active as a producer and trader of services, the precedent to follow today would be India, a country that pioneered cross-border remote work for customers in advanced countries and became one of the largest exporters of information technology and business process outsourcing services. Starting as a back-office for multinational enterprises from the US and Europe, India's firms are now diversifying into more complex business services making use of the full range of new technologies such as artificial intelligence, machine learning, software development, etc. In 2022 almost a quarter of digitally delivered services originated from Asia. India, a country that ranks among the first five leading exporters of commercial services and digitally delivered services, contributed 5.4% (US$ 333 billion) to world exports of commercial services and 5.9% (US$ 227 billion) to world exports of digitally delivered services in that year.[34]

Economists studying international trade might ask what happened to comparative advantage and international competitiveness. Don't they matter anymore? Baldwin (2019) and Baldwin and Forslid (2019) propose an approach based on the assumption that international cost differences are determined by relative labour cost and the share of labour in total costs. They conclude that (i) the diffusion of robots tends to lower the labour cost share of manufacturing and that (ii) the diffusion of digital technologies tends to lower trade costs in the services sector. Consequently, trade costs of manufactured goods are not reduced significantly and the labour cost share of services remains high. Since the labour cost share of manufacturing decreases significantly, traditional comparative advantage based on labour cost is unable to indicate whether a country is competitive in the production of a good, due to the fact that cost differences decrease together with the labour cost share. Labour costs will now be relevant for international comparisons of services, not goods. And since the trade costs of services fall as technical progress evolves, services trade is bound to increase and firms in different countries and regions will be competing on the global services markets.

Finally, on the practical side, Baldwin observes that remote work has been around for some time in many countries, developing and advanced, and that during the pandemic it only got a stronger nudge as a form of work. The idea

[34] WTO (2023), Tables 4 and 5, pp. 22–23. Digitally delivered services in this report include business, professional, technical, computer, financial, intellectual property related, insurance, telecommunication, information and other services.

is that work has been reorganised in many firms engaged in digital transformation where collaborative platforms help people communicate and exchange information and services drawing heavily on telepresence, augmented reality, virtual reality and other digital innovations. If firms are successful in hiring remote workers within the borders of the countries in which they operate, why shouldn't they be in a position to hire remote workers in foreign countries? Telemigration could be a great opportunity for workers in developing countries to find contracts in the global market without having to travel themselves by making full use of mode 1 of services trade.

## 15.7 Conclusions

Technical change has been driving growth and development and disrupting production and trade to the point that services now account for a major share of GDP in advanced and many less-developed countries. Following Baldwin's informed conjecture that comparative advantage could be moving away from the manufacturing sector and towards the services sector where employment stays high despite automation, the question may be posed whether received development strategies should be complemented to include the services sector in the era of robotics and globalisation. There are arguments in favour and against such a paradigm shift. Policies targeting services as a long-run vehicle to spur economic growth and productivity can be justified by the evolution of the manufacturing sector since the 1970s: its share of labour has been declining globally in the wake of the diffusion of robots and digitalisation. For a long time, the primary sector was also considered to be an important source of employment, income and output. Capital-intensive technologies, however, largely transformed agriculture and mining and lowered the labour share in total cost, perhaps with the exception of subsistence agriculture which is still widespread in most developing regions and which directly competes with the services sector in absorbing unskilled labour. By contrast, the services sector has been continuously expanding in developing and developed areas and even penetrated GVC which are increasingly being determined by human capital and intellectual property and not by physical capital. The dynamics of the services sector are being felt both globally and regionally, also in Africa. Moreover, digitally delivered services, a subsector of the services sector, have been expanding, too, particularly in less-developed regions.

For international trade in digital and analogue services to continue on its high-growth path barriers to trade will have to be reduced significantly, also in many African countries. One of the main challenges to trade policy on the African continent is the implementation of the African Continental Free Trade Area, already in effect since 2021. Its incompatibility with existing intra-African integration initiatives could very much complicate the implementation of the AfCFTA's rules of origin, unless trade facilitation negotiations succeed in accelerating intra-African services trade liberalisation. An enlargement of the dynamic services sector in African economies can (but will not automatically)

translate into higher economic growth and productivity. The issues that gave birth to Solow's paradox and Baumol's cost disease hypothesis are still around and should be taken into account in development policy matters, too. On the other hand, Acemoglu's research nurtures the hope that the process of automation is limited and that the implications of robotics and digitalisation for the future of work in developing and developed nations could turn out to be favourable for both unskilled and skilled labour in the services sector.

Remote work is likely to become the new standard for tradable services, and developing countries, especially African countries, could take advantage of lower labour cost in the production and trade of digital services and establish themselves as competitive suppliers on the world market. The services sector seems to present some of the properties the manufacturing sector had in its heyday. This time is different because technical progress is opening a window of opportunity for developing countries to embrace the services sector for development, be it in the form of a complement to the received development strategies or as an alternative on its own. Last, but not least, the digital services industry belongs to the category of industries without smokestacks the expansion of which contributes directly to a decarbonisation of gross domestic product and is thus fully compatible with the United Nation's Sustainable Development Goals.

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CHAPTER 16

# Commodity Exports and Economic Transformation in Africa

*Matthew Kofi Ocran*

## 16.1 Introduction

The need for African economies to be structurally transformed is appreciated by many governments on the continent. The continental political body, the African Union, highlights this aspiration by including it as one of the goals of the priority areas covered in the development document, Agenda 2063.[1] Goal 4 of the development plan relates to structural transformation of African economies. Many decades of export-led development strategy based on commodity exports have failed to structurally transform the economies. In some cases, countries have become more dependent on raw commodity exports. The fact that many years of raw commodity exports have not structurally transformed economies in Africa point to the failure of commodity exports in fostering structural transformation. The experiences of South East Asia's newly industrialised countries underscore the need for a policy shift from raw commodity exports to participating at higher levels of global value chains (GVCs). Participation at higher levels of global value chains holds immense promise for structural transformation if the recent experiences of Vietnam and Bangladesh are anything to go by.

[1] This goal is under Aspiration 1: *A prosperous Africa based on inclusive growth and sustainable development.*

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_16

Africa's natural resource endowment is not in doubt. The continent accounts for a tenth of global oil reserves, 42% of the world's gold and between 80% and 90% of its platinum group of metals. These are in addition to the vast ocean and forest resources, as well as arable land (AU, 2021). The dominance of commodities in African economies exposes the continent to perennial price shocks with detrimental effects.

Commodity dependence in Africa is more acute as compared to other regions of the developing world. UNCTAD (2021b) defines commodity dependence as a situation where a country depends on commodities for 60% or more of its merchandise export revenues. In Middle and Western Africa subregions, dependence is estimated at 95% for all countries except Central Africa Republic in 2018–2019. In general, many economies on the continent are highly dependent on primary commodities. Commodity dependence has implications for many economic outcomes. But more importantly, the phenomenon of commodity dependence is persistent.

After exporting primary commodities for many years, pre- and post-colonisation, African countries have been unable to transform their economies. Primary commodity prices are often exposed to shocks. These shocks explain the booms and busts that have historically impacted commodity markets. Price fluctuations have consequences for the economy, especially, for countries that depend on commodities for a large of share of their foreign exchange earnings.

The preeminent role of commodities in African economies raises important questions. Some of the critical questions that come to fore are (1) what is the nature of commodity markets, and (2) what role can commodities play in fostering industrialisation and economic transformation? This chapter of the book seek to address these questions by examining various aspects of Africa's commodity markets. We also draw on the facts about the markets and then interrogate theories associated with industrialisation and economic transformation. The last section of the chapter provides policy recommendations based on the analysis of the acts, theory and evidence related to industrialisation and economic transformation.

## 16.2 Commodity Exports

Since the wave of political independence across Africa in the 1960s, the composition of the region's export trade has remained unchanged. In the 1960s, agriculture accounted for nearly half of the GDP of the region.[2] Back then, commodity exports was the mainstay of the economies. Seven decades on, commodity trade remains the dominant source of foreign exchange and income in most countries. The degree of commodity dependence[3] has increased for

[2] But there were considerable cross-country differences. The sector accounted for 81% of the GDP in Rwanda and 63% in Nigeria.

[3] Commodity dependence is defined by UNCTAD (2021) as a situation where a country obtains 60% or more of its export revenues from commodities.

many African countries when one would have expected a move away from the export of raw commodities. Using the UNCTAD's definition of commodity dependence, four out of five (83%) of countries on the continent are commodity dependent because more than 60% of their exports trade is made up of primary commodities.[4] Commodity dependence, according to UNCTAD (2021a), is strongly associated with generally low labour productivity growth. But more importantly, commodity dependence makes an economy vulnerable to shocks. For example, commodity dependence is often associated with income volatility, macroeconomic and political instability, Dutch disease, poor governance outcomes, low human development, suboptimal social development and many social and economic ills. In order to illustrate the incessant commodity price volatility episodes that stoke commodity-dependent economies this chapter reviews the price behaviour of a sample of primary commodities over the past two decades.

### *16.2.1 Commodity Price Trends and Variability*

Historically, primary commodities have recorded high levels of price volatility. The level of price of volatility varies considerably among the various commodity groups. To provide some insights into the variability of prices of commodities of interest to African countries we consider a list of 18 commodities. The commodities belong to the six groups: energy, agricultural raw material, metals, precious metals, food and beverages. Table 16.1 provides statistics that describe the price behaviour of the 18 commodities over the last two decades. The prices are reported using index numbers. Each commodity price in 2006 is normalised by setting it to 100 for ease of comparability. The statistics are then estimated using the resulting index numbers. To provide a comparable measure of volatility, we use the coefficient of variation, CV, statistics: a ratio of standard deviation to mean (See Table 16.1).

The analysis suggests coal had the highest price volatility over the past two decades. Crude oil price volatility is well known because of the impact of the energy price on various aspects of African economies, for both importers and exporters. But there are many commodities that experience much more price variability than crude oil. Price of coal, for instance, is one of the most variable commodity exports from Africa. The commodity had a covariance of variation[5] of 75%. Iron ore and rubber, two raw materials, recorded covariance of variation of 68% and 52% with gold at 50% over the same period.

Beverages, coffee and cocoa, experience relatively less price movement as compared to the other commodity groups (Fig. 16.1). The food group—sugar, groundnut, palm oil and beef—comes next after the beverages. Within the

[4] Agricultural raw materials, food and beverages, energy-fuels, metals, minerals and ores.

[5] Coefficient of variation is measured as a ratio of standard deviation and mean. It provides a standardised assessment of price volatility in the present context.

**Table 16.1** Selected commodities price (2016 = 100), 2000M1 to 2023M2

| # | *Commodities* | *Min.* | *Max.* | *Mean* | *S. Dev.* | *Variance* | *CV* |
|---|---|---|---|---|---|---|---|
| 1 | Coal | 33.62 | 577.58 | 126.25 | 94.44 | 8918.69 | 0.75 |
| 2 | Iron ore | 21.26 | 368.51 | 128.02 | 87.66 | 7684.71 | 0.68 |
| 3 | Rubber | 29.70 | 376.98 | 120.10 | 62.09 | 3855.23 | 0.52 |
| 4 | Gold | 20.85 | 157.65 | 84.05 | 41.92 | 1757.57 | 0.50 |
| 5 | Copper | 28.30 | 210.17 | 117.42 | 50.92 | 2592.87 | 0.43 |
| 6 | Palm oil | 28.92 | 258.30 | 101.70 | 44.04 | 1939.86 | 0.43 |
| 7 | Crude oil | 47.36 | 275.43 | 139.96 | 56.70 | 3215.28 | 0.41 |
| 8 | Sugar | 28.17 | 163.90 | 78.51 | 30.53 | 931.92 | 0.39 |
| 9 | Groundnut | 32.59 | 145.39 | 83.47 | 32.39 | 1049.30 | 0.39 |
| 10 | Cotton | 50.15 | 309.47 | 106.23 | 38.56 | 1487.22 | 0.36 |
| 11 | Robusta coffee | 25.75 | 137.65 | 85.46 | 30.10 | 906.21 | 0.35 |
| 12 | Platinum | 43.58 | 208.06 | 108.80 | 37.45 | 1402.13 | 0.34 |
| 13 | Beef | 43.91 | 154.48 | 89.44 | 28.92 | 836.61 | 0.32 |
| 14 | Cocoa | 29.77 | 121.82 | 77.46 | 22.59 | 510.46 | 0.29 |
| 15 | Aluminium | 80.01 | 218.08 | 122.61 | 28.24 | 797.72 | 0.23 |
| 16 | Timber (hardwood logs) | 48.78 | 165.33 | 93.62 | 21.06 | 443.53 | 0.22 |
| 17 | Tea | 56.39 | 140.22 | 92.91 | 20.01 | 400.50 | 0.22 |

Source: Author's computation based on IMF (2023)

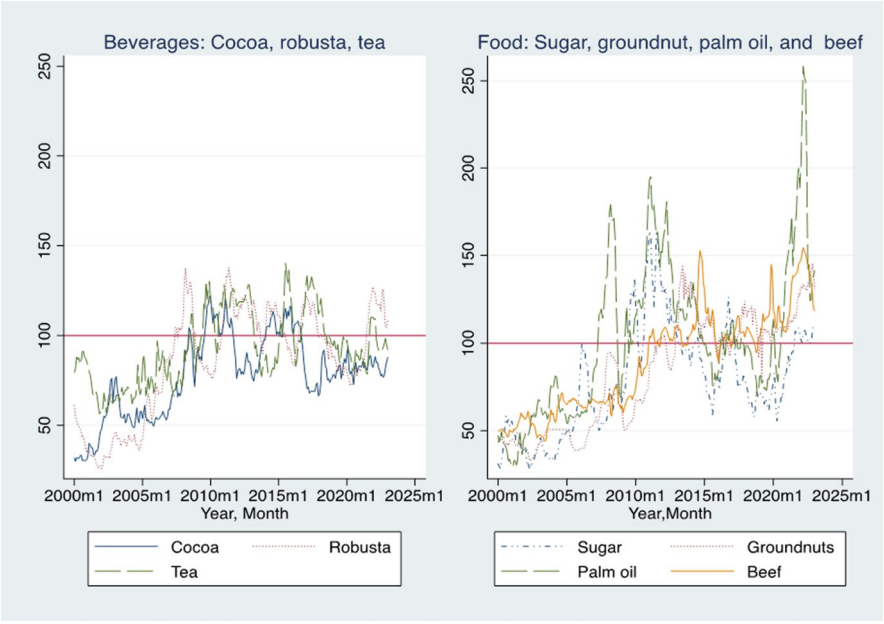


**Fig. 16.1** Beverages and food commodities: Price Index, 2006 = 100

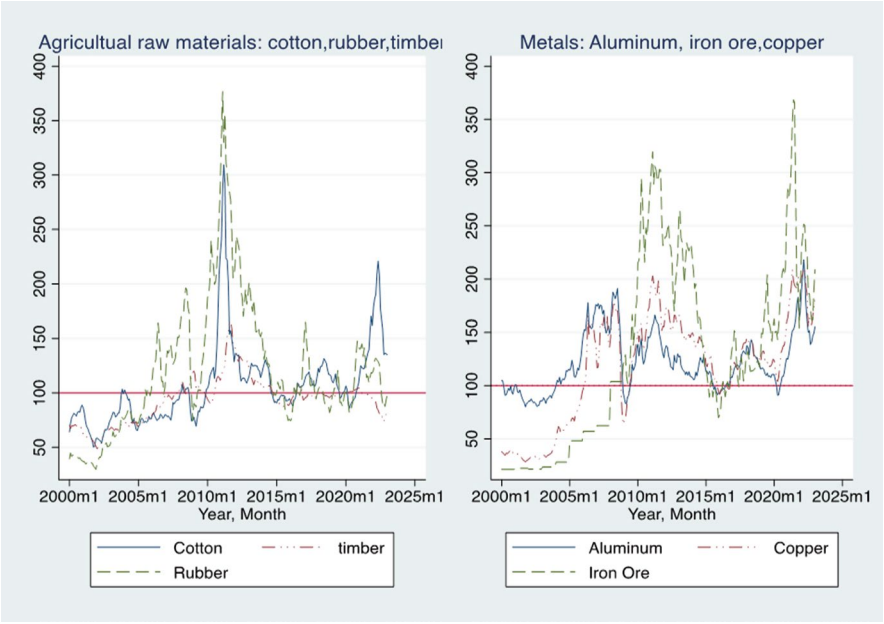


**Fig. 16.2** Agricultural raw materials and metals: Price Index, 2006 = 100

beverages group, Robusta coffee has had more variability than the cocoa and tea. The palm oil in the food commodity group recorded higher peaks in price behaviour than the other food commodities such as sugar, beef and groundnut. The precious metals gold and the platinum group of metals also tend to experience variation (Figs. 16.2 and 16.3).

### *16.2.2 Raw Commodity Exports, the Bane of Africa's Commodity Dilemma*

Ivory Coast and Ghana, two West African countries, account for 60% of world cocoa exports, the main ingredient in the manufacture of chocolate. But the two countries make a paltry $6 billion (6%) of the $128 billion global chocolate trade (SwissInfo, 2023). This is because the leading exporters trade mostly raw bean, which is an input in the global value chain of chocolates. Most of the commodity exports from Africa are raw and of low value with very little or no processing at all.

The quest for new energy sources in the global energy transition has opened up immense opportunities for countries that have deposits of the minerals and ores needed for clean energy production. For example, cobalt is a critical input in the production of rechargeable batteries used in electric vehicles. And DR Congo is the world's leading producer of the commodity. The country accounted for 70% of the global output of cobalt in 2019 and owns more than

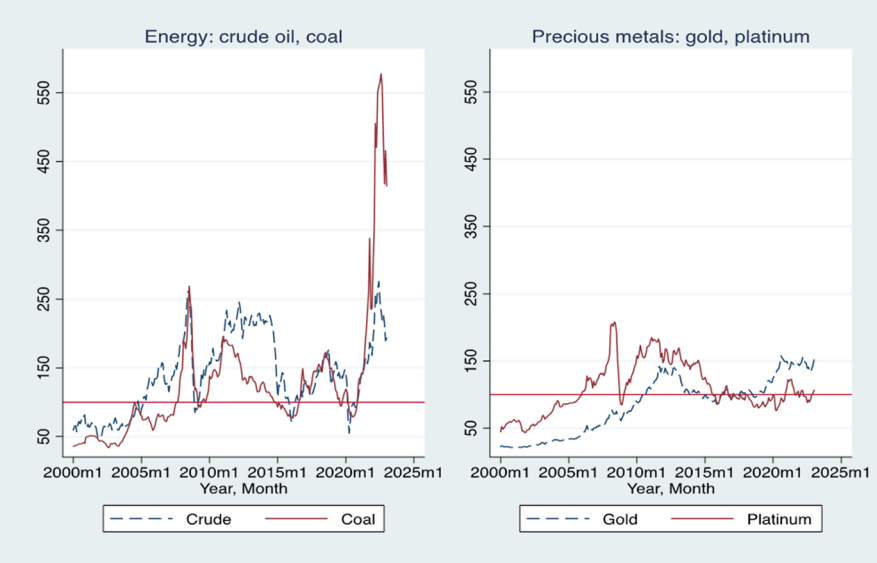


**Fig. 16.3** Energy and precious metals: Price Index, 2006 = 100

50% of the world reserves.[6] Unfortunately, just like many commodity exports from Africa, this strategic commodity is exported partially refined to China, mostly. It is then refined by China and exported in processed state. China also uses the refined products in the manufacture of batteries for its thriving Electric Vehicles (EV) manufacturing industry among others. Recently a few African countries such as Zimbabwe (lithium) and Botswana (diamonds) have outlawed the export of lithium and diamonds in their raw forms.

## 16.3 Structural Transformation

On the onset it is important to distinguish between certain key terms associated with economic performance. Sustained and long-term growth in output (economic growth) leads to economic development. Structural transformation, on the other hand, is concerned with shifting resources to more productive sectors of the economy. And this facilitated by industrialisation and the movement of labour and other resources to sectors of the economy that is more productive, such has manufacturing and services. Sustained economic growth in the long term is a necessary condition for structural transformation but it is not a sufficient condition. The theories of growth and development have evolved. And there is a vast literature on economic growth and development (Ocran, 2019). However, there isn't a well-defined theory of economic transformation. Indeed, Breisinger and Diao (2008) argue that no single

[6] According to the US Geological Survey, USGS.

theory can fully characterise the transformation process. They rather argue transformation is best described by a collection of stylised facts that characterise the outcome of transformation patterns. The transformation patterns can be described by stylised facts. The transformation experience of nineteenth- and twentieth-century Europe and newly industrialised nations of Asia and Latin America produces similar patterns, and these patterns are instructive.

Economic transformation occurs when a country is able to move labour and other resources used in production from lower to higher productivity activities. Syrquin (1988) provides a useful definition. He suggests structural transformation ensues when there is a change in the relative importance of economic sectors in the economy. The interrelated process of structural change that follows economic development is together referred to as economic transformation. Kuznets in his 1973 Nobel Lecture argues "the rate of structural transformation of the economy is high. Major aspects of structural change include shift away from agriculture to non-agricultural pursuits and, recently, away from industry to services; a change in the scale productive units, and a related shift from personal enterprise to impersonal organisation of economic forms, with a corresponding change in the occupational status of labor" (Kuznets, 1973). The shift from the less productive primary sector of an economy to the more productive sector, mostly industry, is at the core of structural change. Shifting of resources to more productive sectors of the economy increases the overall productivity of the economy. Increased productivity is imperative for increasing incomes, reducing inequality and improved welfare. The changes that come along with structural transformation make the absence of significant structural change in an economy concerning. That is why structural transformation of Africa's economies is so important if the economic and social challenges on the continent are to be ameliorated.

Theories of economic development and growth have a long history. But the post-World War II period witnessed the beginning of greater effort to understand how to get economies to grow faster. The economic growth literature can be viewed from two broad perspectives: macroeconomic and development economics perspectives.

Roy Harrod (1936) and Evsey Domar (1947) provided explanation of economic growth before the emergence of neoclassical growth models in the 1950s. The neoclassical models, like the classical growth models, consider the economy as a one-sector model in its analytical framework (Solow, 1956; Swan, 1956). Neoclassical growth models suggest key driver of economic growth is technological improvement. The one-sector models are based on marginal analysis, perfect mobility of factors across sectors, to the extent that there is movement towards the equilibrium of marginal products and rates of return. Consequently, sectoral differences are less important because adjustments bring supply and demand into equilibrium, which prevents the possibility of persistent differences in sector productivity. The new growth models that emerged in the 1980s provide a semblance of multi-sectoral approach that allows for technology and human capital to feature as independent "sectors"

that drive growth (Lucas, 1988; Mankiw, 1995; Rebelo, 1991). Over time there have been several extensions of the neoclassical growth models. But all the extensions retain the basic one-sector framework.

The Nobel Laureate, Arthur Lewis (Lewis, 1954, 1958), is credited with the first attempt at formalising structural change in an economic growth model with his two-sector model of traditional and modern sectors of the economy. Lewis provides a perspective of economic growth based on development economics. He argued that growth in low-income countries can be better explained by a dual-economy model. The dual economy is comprised of a traditional agricultural sector that use little or no modern inputs of production, and a modern or capitalist sector. The traditional or agriculture sector is deemed technologically backward with low productivity. On the other hand, the modern sector is characterised by factor accumulation, innovation and high productivity. Because of the sharp contrast between the two sectors they can't be analysed as a unit. Because of the dynamism of the modern sector, economy-wide growth is determined, to a great extent, by the rate at which resources are moved from the traditional to the modern sector. Arthur Lewis's work was later expanded on by Ranis and Fei (1961). Arthur Lewis highlighted the notion of surplus labour in developing countries with traditional economies. Lewis argued that these countries will continue to have surplus labour for as long as the opportunity cost of labour to the capital sector or modern sector was insignificant. Islam and Iversen (2018) elaborating on the Lewis model suggest that the model has an inherent turning point. A point at which the transfer of labour to the high productivity sector from the low productivity sector ceases following an equalisation. At this point the economy is consistent with the neoclassical explanation regarding economic growth.

### *16.3.1 Stylised Facts*

The stylised facts, empirical regularity, regarding structural transformation date back to the work of many (Clark (1957), Chenery (1960), Kuznets (1966), and Syrquin (1988)). Herrendorf et al. (2013) summarised the state of the evidence five decades after Clark and the others. Herrendorf and Rogerson drew on times series data from 1800 to 2000. The distinct patterns associated structural transformation are (1) agriculture's share of total value added in the economy falls significantly, (2) share of labour force employed in agriculture falls, while that of other sectors rise and (3) distribution of population shifts from rural to urban centres. According to Kuznets, transformation is associated with modernisation of not only the economy but also society in general and, importantly, institutions (Brohman (1997) and Breisinger and Diao (2008).

*Evidence from Developed Countries*

Data on sectoral employment and value added shares over a period of two centuries for ten developed countries is incredibly insightful. The countries are Belgium, Finland, France, Japan, Korea, Netherlands, Spain, Sweden, United

Kingdom and United States. And the centuries considered are the nineteenth and twentieth centuries. The sectoral shares of employment in agriculture have fallen for all countries precipitously, from 80% to less than 2%. In a similar fashion, agriculture value added has followed a downward trend. And in all instances, the rate of fall was associated with increases in per capita income. On the contrary, sectoral shares of employment in total employment for services have increased. Services share in value added has also increased. The story for manufacturing is, however, different. Manufacturing share of total employment has been bell shaped. Manufacturing share of total value added has, equally, followed a bell shape. The regularities represented by the sectoral shares of employment and value added for the ten developed countries under discussion are a typical demonstration of structural transformation (Herrendorf et al., 2013). The transformation pattern associated with the structural transformation in developed European countries is consistent with patterns observed in newly industrialising countries in South East Asia and Latin America (Breisinger & Diao, 2008).

*Evidence from Africa*

Employment and value added shares of African countries paint a telling picture. Even though value added shares for agriculture have decreased over the last five decades, agriculture employment shares have not fallen significantly. The weak labour mobility, in part, explains the low standard of living in most African countries. Caselli (2005) and Restuccia et al. (2008) argue that developing countries are less productive in agriculture relative to developed countries. Given that these countries have a greater share of the workforce in agriculture does not portend well for poverty reduction. Rogerson (2008) also shows how differences in agriculture productivity account for large cross-country differences in aggregate productivity.

Africa has considerable informal sector. Estimates indicate the informal sector varies in size from a low of 20% of GDP in Mauritius to over 60% in most countries, including Nigeria, the largest economy in Africa. Eight out of ten employment opportunities in Africa are in the informal sector (ILO et al., 2022). The large informal sector is a source of employment in the ever-increasing services sector, where the majority of the employment is in petty retail trade. The workers in the informal sector are often poorly educated and less productive. It is no wonder that productivity in most African countries is so low.

The question that needs attention relates to the mobility of labour from agriculture to more productive sectors of the economy. There is evidence that in South Korea, the transition was aided by international trade (Teignier, 2012). In the case of China, Dekle and Vandenbroucke (2012) suggest that differential productivity growth and reduction in the relative size of government have been instrumental in explaining structural transformation. However,

the Chinese policy of *Hukou*[7] slowed the movement of agricultural labour from the rural areas to productive sectors in urban areas.

### *16.3.2 Drivers of Structural Transformation*

Drawing on the review of the development economics literature over a period of five decades, Breisinger and Diao (2008) identify four broad groups of factors that drive structural transformation. These are (i) technology-led productivity growth, (ii) rapid capital accumulation, (iii) the role of linkages and (iv) the role of market, institutions and governments in transformation. Apart from these drivers, there are many factors that can be connected to the broad themes highlighted by Breisinger and Diao. For instance, infrastructure investment speeds up structural transformation through capital accumulation (Herrera Dappe & Lebrande, 2021), quantifies the effects of future transport investments and trade facilitation on economic development, and shows how capital accumulation and structural transformation are enhanced with investment in infrastructure using the example of countries in the Horn of Africa.

*Technology-Led Productivity Growth*

Arthur Lewis's dual-sector model provides a theoretical basis that explains how technology-led productivity growth in the industrial sector determines economic transformation. Lewis suggests marginal productivity of labour is almost zero, and sometimes negative for many low-income countries, because of the considerable traditional sectors in those economies. The productivity gap between the traditional and modern sectors when coupled with the movement of labour to the modern sector from the less productive sector leads to an increase in production in the economy. Increased performance of the modern sector, supported by increase in labour together with a concomitant lowering of wages, leads to increase in overall productivity. In the end, productivity growth in the modern sector of the dual economy, and the sectoral movement of labour, leads to a convergence in productivity. Equalisation of marginal productivity of labour across the two sectors and full employment in a composite or mono-economy ensue.

Theoretical explanations regarding the labour transition from traditional to the modern sector are supported by Ranis and Fei (1961). Others argue that agricultural revolution that is driven by technological innovations can also drive structural transformation through increased productivity of the sector. Irz and Roe (2005), for instance, argue agricultural productivity increases the rate and pattern of growth in an economy. As pointed out by Breisinger and Diao (2008) the Green Revolution provides evidence regarding how technology-led productivity growth has the capacity to convert traditional agriculture into a modern sector. Apart from the successful Green Revolution

[7] This is a registration regulation that restricts movement from rural areas to urban centres in China. It has been in force since 1958.

experiences in India and China, Mexico also represents a success story from South America. In all this, public sector institutions are required to play leading coordinating and facilitation role in technologically transforming the traditional agricultural sector. There is, however, a note of caution regarding public investments meant to support innovations in agriculture. The importance of efficiency and appropriate sequencing of public investments is imperative to ensure that the investments are productive.

While agriculture cannot be ignored the original thesis of Lewis on the critical role of the modern sector in structural transformation is also supported by UNCTAD and UNIDO, who indicate the industrial sector, particularly manufacturing, has the greatest potential to engender sustained economic growth, job creation and poverty alleviation (UNCTAD & UNIDO, 2011).

*Rapid Capital Accumulation*

Productivity growth due to increases in technology-led productivity is associated with increased rate of capital accumulation. Economy-wide capital accumulation, covering the agriculture sector, is a phenomenon seen in countries that have undergone structural transformation. This observation was at the front and centre of development economics discourse in the 1940 and 1950s. The role of massive capital inflows, from the United States of America, to Europe during the post-War reconstruction period is another testament to the place of capital in driving growth and transformation. Indeed, the understanding of the important role of capital accumulation is espoused in the work of notable development economists, Hollis Chenery and Simon Kuznets, in the 1960s. The recent experiences of the newly industrialising countries of South East Asian provide a strong evidence of this phenomenon. As noted by Ocran (2019, pp. 71–130), investments and savings in South Korea exceeded 30% as a share of GDP on annual basis during the period that the economy was being structurally transformed. In the case of China, investments rose from a low of 15% in 1960, grew steadily and peaked at 45% in 2016.

Bustos et al. (2020) argue against the view that high agricultural productivity could hamper industrial development. The authors provide evidence from Brazil to support the assertion that agricultural productivity can raise savings and supply of capital. The increase in savings and capital can then support the expansion of capital-intensive sectors such as manufacturing. The study shows that when savings were generated from increased agricultural productivity in rural Brazil capital flowed to the urban areas.

*Role of Linkages*

Baltheme and Gorodninchenko demonstrate, empirically, the role of linkages and aggregate economic productivity. The authors developed a neoclassical framework based on observed input-output structure of an economy with linked technological constraints and various distortions in input and output markets. The study provides evidence of strong linkages between output per worker and total factor productivity. The strong relationship between

intermediate goods linkages and economic development has a long history in the literature. Forward and backward linkages created by capital investments in the industrial sector re-enforce economic interlinkages during the transformation process as pointed by the seminal work of Hirschman (1958). The interlinkages between the agricultural sector and the non-agricultural sectors also provide valuable linkages that lead to structural change (Johnston & Mellor, 1961).

Intersectoral relations between non-agriculture and agriculture are thought to define the course of structural transformation in developing countries (Breisinger & Diao, 2008). Indeed, Meier (1989) argues that even though the share of agriculture in total value added falls over time as a country progresses, agricultural development in the short and medium run is imperative for structural transformation. The transformation of agriculture from a traditional sector to modern sector generates linkages between consumption and production on the one hand and between rural and urban on another. Through higher demand for fertiliser and other modern inputs, produced by the manufacturing sector and with the intermediation of marketing and trade services, agriculture connects to manufacturing through a backward linkage. In developing countries, the consumption linkages are the strongest, and this can lead to higher growth and reduction of poverty (Breisinger & Diao, 2008). But Breisinger and Diao (2008) also sound a warning. They draw our attention to the fact that in many developing countries fertiliser and other modern agricultural inputs are imported. This is a challenge. The transformation of traditional agriculture into a modern sector activity requires that the entire economy is modernised and made more efficient and effective (Hayami & Ruttan, 1985).

*Markets, Institutions and Government*

There is vast literature on the importance of institutions in the economic development and structural transformation of economies. There are also studies that specifically link institutions to growth and the transformation process. Rodrik suggests institutional reforms are endogenous component of the transformation process (Rodrik, 2003).

Well-developed and functioning markers are also required for input and product markets necessary for the reallocation of factors and resources needed for the transition of traditional agriculture to the modern sector. For example, the technologies for modernisation of traditional agriculture and output from the sector must be traded efficiently and effectively. Well-functioning institutions are also needed to support the requisite value chain of services, including financing and other business support services. In the end, all these support services have to be exchanged in well-established markets.

The need for governments to provide the necessary environment for markets and institutions to thrive is often the view of market fundamentalists who argue for minimal role for the state in the development process. However, evidence from the recent development experiences of the successful South East

Asian countries, including China, suggests a bigger role for state. Surely, the state must ensure the rule of law, protection of private property rights, guarantee personal security and the provision of public goods in general. But in situations where markets do not exist or are incomplete for the provision of critical goods and services needed for increased productivity of firms and households, governments must step in (Ocran, 2019). UNECA recounts how government interventions in post-War Europe gave rise to the present welfare states (UNECA, 2019). A strong state is also needed for markets to function properly because of the critical roles of the state in providing an anchor and impetus for the institutional framework that underpins markets.

## 16.4 Global Value Chain Participation and Industrialisation

Export-led growth has been at the core of Africa's development effort since independence in the 1960s. After many decades of exporting primary commodities the impact of these exports on economic development and transformation has been marginal. Global production networks and value chains have been identified as key enablers of structural economic changes at regional, national, industry and firm levels (Sturgeon & Memedovic, 2010). While some countries in Asia and Latin America successfully participate in global value chains Africa is far from participating in GVCs in any meaningful way. This section of the chapter examines the evolution of trade theory to the New New-Trade Theory, which forms the theoretical basis of global value chains.

The neoclassical trade theory is based on the work of Heckscher and Ohlin through to that of Samuelson. These theories are premised on three key assumptions. The classical view of trade assumes that markets are perfectly competitive. Production is characterised by a constant return to scale. And lastly, producers assumed to be homogeneous. The classical view of trade supposes that countries trade final products. While this assertion may have been true in the past it is no longer tenable. The idea of intra-industry trade emerged in the 1970s. In the 1980s, Helpman and Krugman developed the New Trade Theory (Helpman & Krugman, 1985; Krugman, 1979, 1980). The New Trade Theory challenged the assumption of constant return to scale. The view here is improvements in production technology lead to increasing return to scale. This notion forms the thrust of international trade under imperfect competition.

Following the emergence of the New Trade Theory, researchers assembled stylised facts that suggest considerable heterogeneity in firm productivity between exporters and non-exporters in the same industry (Bernard et al., 2010). Melitz (2003) provides theoretical explanation to the stylised facts and evidence that underscore firm heterogeneity in international trade. The new explanation, unlike the orthodox trade theory, maintains fixed cost is incurred in export trade and that firms engage in endogenous selection in relation to

market entry or exit. Subsequently, the Melitz model provides a theory that explains the prevalence of firm heterogeneity within given industries. The Melitz's work, therefore, debunks the Classical Trade view that producers are homogeneous. The heterogeneity of international trade-related theory constitutes the New New-Trade Theory.

The third major reconstruction of the Classical Trade Theory is found in the literature on Global Value Chains (GVCs). The underlining theme of GVCs is the fragmentation theory of production proposed by R. Jones and Kierzkowski (1990). Balwin (2006) describes the notion of unbundling with Grossman and Rossi-Hansberg (2008) emphasising the concept of trade in tasks. The GVC theory is, therefore, a product of varied cognate academic disciplines. Besides economics, valuable contribution to the shaping of the theory has come from sociology, management and industrial organisation. The non-economic approaches developed in tandem with those from the economics discipline. The phenomenon of value distribution in the fragmentation of production processes gave rise to the designation of global value chains (Gereffi et al., 2005; Inomata, 2017). The term originates from the work of Michael Porter, a marketing specialist, who first presented the concept of value chains in his acclaimed book in 1985. The New New-Trade Theory, which underpins GVCs, is increasingly gaining recognition in the trade literature.

Frederick (2010, 2014) provides a detailed representation of the value chain ecosystem, the value-chain reference model. According to the framework, GVCs have four main components: (1) value-adding activities, (2) supply chain, (3) end-use markets and (4) business supporting environment. Research and development, design, production, logistics, marketing and services constitute the value-adding activities. The supply chain component has four pillars. These are inputs, components, final products and distribution and sales. There are markets for each component of the supply chain. The supporting environment consists of infrastructure and finance, government services, business, information and technology services, education, testing and training, trade and professional associations as well as non-governmental organisations and standards.

The economic development impact of GVCs is also beginning to accumulate. The literature provides evidence that GVCs provide opportunities for technology and knowledge transfer, increased FDI flows, and human capital accumulation. Taglioni and Winkler (2016) suggest that long-lasting productivity gains that emerge from GVC participation can foster sustainable economic growth. But more importantly, participation in GVCs has the potential to pivot low- and middle-income countries onto a path of industrialisation and as major services suppliers.

GVC facilitates productivity growth through specialisation, use of foreign inputs, technology spill-overs and knowledge transfers (Criscuolo et al., 2016). The productivity gains from participating in GVCs are derived from specialisation in key tasks that optimise allocation of resources by participating firms and by offshoring inefficient undertakings (Grossman & Rossi-Hansberg, 2008;

Amiti & Konings, 2007; and Bas & Strauss-Kahn, 2015). GVC participations enhance export opportunities for developing countries; exporting firms employ more and offer relatively better-paying jobs ((Taglioni & Winkler, 2016). While the labour effect is contested, what is clear, though, is that countries with surplus labour and low wages, like most countries in Africa, have more significant positive labour effect.

### *16.4.1 Global Value Chain Participation Rates in Africa*

The level of GVC participation in Africa is low compared to other regions of the world. GVC participation as a ratio of GDP is highest for high-income countries (14%), followed by Asia. There are considerable variations between the participation rates even among African countries. Generally, the Southern Africa region performs better than other regions of the continent (Fig. 16.4). Unlike the high-income countries and Asia, Africa has a disproportionately high backward[8] participation rate, which suggests that Africa uses very little imported inputs or intermediates in the production of her exports.

Figure 16.5 shows the level of foreign content in the exports for countries in Africa. Libya and Gabon, major crude oil exporters, have the least foreign content in their exports. On the contrary, Ethiopia, Lesotho and Mauritius have more than 30% foreign content in their exports.

Africa's foreign value share of exports is estimated at 14%, one of the lowest in any region of the world. The continent obtains raw material and

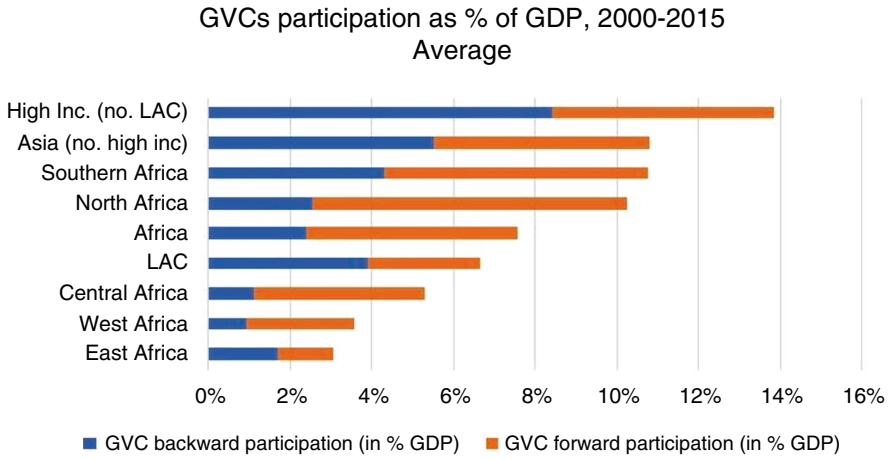


**Fig. 16.4** GVC participation by region. (Source: World Bank 2020)

[8] Forward GVC participation relates to the production and export of inputs that are further re-exported; backward GVC participation ensues when imported inputs are used to produce goods that are exported.

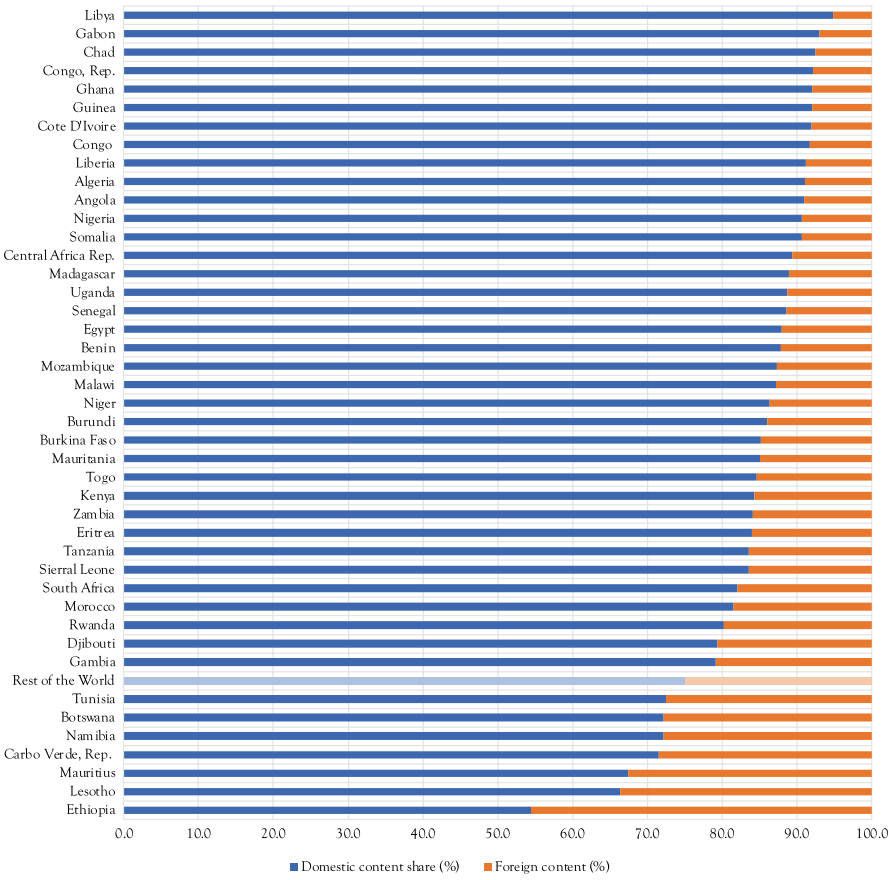


**Fig. 16.5** Average foreign and domestic content of exports, 2000–2015. (Source: Author's estimation based on *export of value added database* of the World Bank 2020)

intermediate goods and services that are used in production for global value chains mostly from regions outside the continent. Only 5% of the foreign value added in Africa has inputs from countries in the region (Table 16.2). The lion's share of foreign value in Africa's exports comes from *Europe and Central Asia* (42%). *East Asia and the Pacific* is the next important source of foreign value component in African exports (23%). Incidentally, these two regions, in addition to North America, are the leading participants in global value chains. The region with the highest foreign value share in its exports is *Europe and Central Asia* (36%). This is followed by *East Asia and Pacific* (25%). *Latin America and the Caribbean* comes next with 15%. *Middle East and North Africa* has a foreign value added share of 14%, the same as *Sub-Saharan Africa*.

**Table 16.2** Sources of inputs in percentages

| | | *Source region of value added in exports* | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Region* | *FVA Share* | *EAP* | *ECA* | *MENA* | *NA* | *LAC* | *SA* | *SSA* |
| *East Asia and Pacific, EAP* | *25* | *55* | *20* | *6* | *12* | *1* | *2* | *1* |
| *Europe and Central Asia, ECA* | *36* | *17* | *65* | *4* | *8* | *4* | *2* | *2* |
| *North America, NA* | *19* | *24* | *23* | *3* | *39* | *2* | *2* | *2* |
| Middle East and North Africa, MENA | 14 | 22 | 50 | 8 | 10 | 8 | 7 | 2 |
| Latin America and the Caribbean, LAC | 15 | 17 | 28 | 3 | 24 | 3 | 2 | 2 |
| South Asia, SA | 13 | 39 | 36 | 8 | 10 | 8 | 3 | 2 |
| Sub-Saharan Africa, SSA | 14 | 23 | 42 | 6 | 10 | 6 | 5 | 11 |

Source: World Bank 2020

### *16.4.2 The Role of the African Continental Free Trade Area Agreement*

There is a strong correlation between GVC-related trade and depth of preferential trade agreements. Here, the depth of trade agreements refers to the number of policy areas that an agreement covers. The more policy areas trade agreements cover, the deeper the agreement (World Bank, 2020). After considering 20 important policy areas, the World Bank concludes, apart from the recent Africa Continental Free Trade Area agreement, existing preferential trade agreements in Africa are shallow. For instance, the South African Customs Union (SACU) covers four policy areas. The West African Economic and Monetary Union (WAEMU) covers five policy areas and six for the West African Economic Community (ECOWAS). Common Market for Eastern and Southern African Countries (COMESA) and South Africa Development Cooperation (SADC) have agreements in 10 policy areas each, while the East African Community covers 11 policy areas. The most far reaching, the AfCFTA agreement covers 15 policy areas. There are four policy areas that none of the trade agreements so far cover. These are environmental laws, labour market regulation, public procurement and state aid. Instructively, apart from AfCFTA and COMESA none of the trade agreements have provisions regarding investment policy. Significantly, the SACU and SADC are the only trade agreements without provisions on capital movement.

## 16.5 Conclusions and Way Forward

GVC participation holds great promise for structural transformation, especially given its ability to foster industrialisation, technology transfer, foreign direct investment and employment creation. But GVC participation also requires that in addition to the deepening of trade agreements in the region the necessary value chain ecosystem is created. As pointed out earlier, the necessary business supporting environments, such as infrastructure, government services, business, information and technology services, educated labour force, have to be

created. And here the role of governments is critical. A more attractive value chain ecosystem can stand countries in good stead in attracting global lead firms to set up production sites and thereby plug countries into the GVCs. Through the participation in higher levels of GVCs Africa can add value to its exports, provide jobs to its youth and in the process help transform the economies structurally.

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CHAPTER 17

# Financial Development and International Trade

*Lordina Amoah and Victor Murinde*

## 17.1 Introduction

Financial development and trade are essential components that significantly contribute to the functioning of modern economies. Consequently, they garnered significant attention in both theoretical and empirical research. Generally speaking, financial development denotes advancement in the financial sector of an economy (Amoah et al., 2020). Specifically, it connotes improvements in financial institutions, financial markets, financial instruments, and the regulatory environment that lower the costs of conducting financial transactions, obtaining information, and enforcing contracts. Financial development is measured in several ways because of its multifaceted nature and the dimensions it covers. There are four dimensions of financial development, and these are depth, accessibility, efficiency, and stability of the financial sector. Empirical research uses several indicators as proxies for financial development, depending on the specific issue being investigated. Some of the more frequently used

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_17

indicators[1] in empirical studies are the ratio of liquid financial liabilities to gross domestic product (GDP) and the proportion of credit allocated to the private sector relative to GDP. On the other hand, trade is described as business transactions involving the exchange of products and services between residents and non-residents. Hence, trade may be defined empirically as the aggregate value of exports and imports of goods and services, expressed as a proportion of the gross domestic product (GDP).

Financial development and trade could present enormous benefits for economic growth and development. As stated by Levine (1999), a robust financial sector performs several crucial functions, including the generation of information regarding prospective investments prior to their execution, the allocation of capital, the monitoring of investments, and the implementation of corporate governance practices subsequent to the provision of financial resources. Additionally, it facilitates trading activities, enables diversification and risk management, mobilizes and consolidates savings, and simplifies the exchange of goods and services. These functions are executed optimally in developed financial sector. Numerous theoretical propositions have been put out on the interplay and causal connection between financial development and economic growth. These include the supply-leading hypothesis, the demand-following hypothesis, bidirectional causality, and the no-causality hypothesis. Advocates of the supply-leading hypothesis contend that financial development serves as a productive input, hence exerting a causal influence on economic growth (Levine, 2005; Rajan & Zingales, 1998). On the other hand, proponents of the demand-following hypothesis argue that financial development is a consequence of economic growth (Robinson, 1952; Kuznets, 1955; Patrick, 1966; and Ang & McKibbin, 2007). There is also the bisectional causality between financial development and growth. This theory suggests that financial development is the result of economic growth, which also causes financial development (Berthélemy & Varoudakis, 1996). In contrast, Lucas (1988) argues that a causal link between financial development and economic growth does not exist.

Notwithstanding the causality debate, the preponderance of empirical literature investigating the finance-growth nexus concludes that financial sector development fosters economic growth (Schumpeter, 1912; Greenwood & Jovanovic, 1990; Beck et al., 2000; Levine et al., 2000; Arestis et al., 2015; Seven & Yetkiner, 2016). The philosophy is that economic growth is enhanced through the accumulation of capital and technological progress. That is, through the activities of the financial sector, capital is accumulated as the savings rate increases and capital is allocated optimally towards capital-producing technologies (Romer, 1989), thereby, driving technological transformation.

Trade is also an engine of growth and facilitates integration of the world economy. The benefits of trade are borne by consumers, businesses, and the

[1] More comprehensive measures of financial development are contained in the World Bank's Global Financial Development Database (GFDD). The database offers a framework for four distinct sets of metrics that portray the characteristics of an efficiently operating financial system.

economy as a whole. Through trade, consumers enjoy a variety of products and services not available in the local markets at competitive prices. Apart from boosting the reputation of businesses in the international market, trade provides opportunities for businesses to increase their market share, revenues, and risk management, among others. For the economy in general, trade facilitates aggregate output, job creation, poverty reduction, infrastructure improvement, increases in foreign exchange reserves, the pace of industrialization, and other economic opportunities (Arora & Mukherjee, 2020). Prominent theoretical frameworks, including the Heckscher-Ohlin model, the Ricardian model, and the New Commerce Theory, underscore factor endowments, technology, and economies of scale, respectively, as the primary determinants of comparative advantage in the realm of international trade. The empirical research conducted in recent years has examined an additional aspect of comparative advantage, namely the level of financial development in different nations (Yakubu et al., 2018; Nguyen & Su, 2021). The premise is that financial development can drive international trade through improvements in the trade sector structure. That is, capital accumulation increases with a developing financial sector, which in turn is allocated to various industries, including the trade sector to increase technological innovations and ultimately improve production efficiency.

The history of trade dates back to prehistoric times. The establishment of the General Agreement on Tariffs and Trade (GATT) in 1947, in the aftermath of World War II, aimed to promote freer trade by means of multilateral trade organizations. Subsequently, the formation of the World Trade Organization (WTO) further moved the global community towards a trading paradigm characterized by increasing liberalization. In the early 1980s, several developing countries embarked on trade and financial liberalization and structural reforms in order to transition to market-oriented economies. The case for liberalization was based on the assumption that resource reallocation and specialization in commodities or sectors of comparative advantage may benefit the economy. Furthermore, McKinnon (1973) and Shaw (1973) contended that the repressive financial systems that were maintained impeded savings, capital accumulation, and investment. As a result, they argued that liberalizing trade and the financial system would boost financial development and stimulate competition in the industry, which is a catalyst for economic growth. The implementation of liberalization measures yielded a notable upsurge in commerce, including both exports and imports. Additionally, it led to a rise in the quantity of preexisting financial institutions, an emergence of new ones, and the introduction of various economic innovations. While there have been positive experiences with the liberalization process, it has not been without cost. There are the protectionist arguments about the fate and survival of the infant industries. There are concerns about relatively small indigenous businesses being crowded out by larger, more resourceful foreign businesses. The consequence is an increase in unemployment and potential balance of payments problems. There are also the

advocates of liberalization who advance the notion that liberalization may increase competition, efficiency, and growth (Rajan & Zingales, 2003).

Empirical research has indicated that financial development facilitates commerce by offering various financial services such as loans and insurance. According to Kletzer and Bardhan (1987) as well as Beck (2002), nations exhibiting a somewhat advanced financial system have a comparative advantage in industries and sectors that heavily depend on foreign finance, such as manufacturing sectors. Financial development drives trade through improvements in the supply of capital to trade industry sectors with high efficiency and great potential. Indeed, since the 1980s, the link, causality, and dynamics between financial development, trade, and economic growth, individually and on aggregate, have gained traction in the empirical literature. Some studies provide evidence that shows that financial development drives trade. Others contend that this finding is only true within specific contexts. Numerous scholarly investigations also explore the significance of financial development and commerce in the process of economic expansion.

In this chapter, we provide a review of these debates. Section 17.2 discusses the trends in financial development and trade. Following that, Section 17.3 discusses the relationship and causality between financial development and trade. The overarching question that we address in this section is whether financial development and trade are complements or substitutes. Section 17.4 discusses conditions under which financial development drives trade. The section also examines whether these benefits are reaped in the same way across all countries, and the transmission mechanisms (direct and indirect). The last Section 17.5, discusses the benefits and risks posed to an economy as a result of opening up its financial sector and trade simultaneously.

## 17.2 Trends in Financial Development and Trade

Governments of developing countries have put policies in place to foster development in the financial and trade sectors of their economies. The trade and financial liberalization of the 1980s were aimed at improving exports and diversifying the economy. Despite efforts to develop the financial sector in Africa, it remains underdeveloped compared to other continents. Figure 17.1 provides a graphical view of trends in financial development in Africa compared with Asia and Pacific, Europe, and Middle East and Central Asia. The figure indicates that Africa's financial development is significantly less than that of Europe, Asia and the Pacific, and the Middle East and Central Asia. In the period between 1980 and 2020, Africa's average annual growth rate was only 1%, whereas the other three continents recorded significant growth rates (15%, 20%, and 10%). In 2020, Africa's financial development was 16%, which is substantially lower compared to Asia and the Pacific (36%), Europe (50%), and the Middle East and Central Asia (27%). According to the IMF statistics, Africa's financial sector grew by an average of 1% annually between 1980 and 2020, with some years experiencing constant growth. For example, the financial

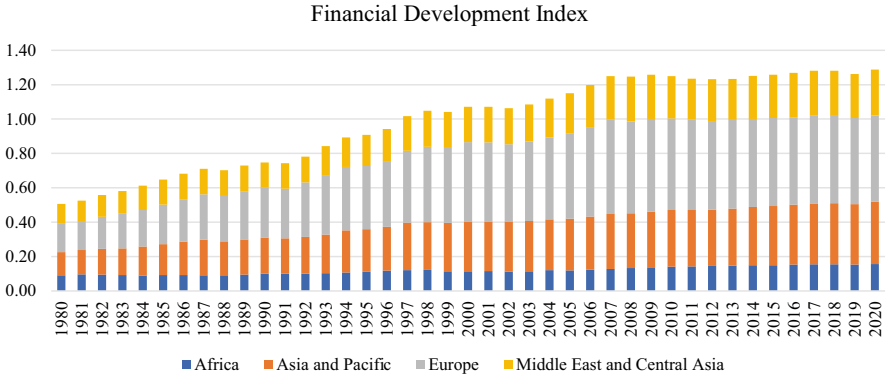


**Fig. 17.1** Trends in financial development, 1980–2020. (Source: Authors construct using data from International Monetary Fund, 2022)

development rate stood at 9% between 1982 and 1988 and remained constant for five years until it increased to 10% in 1989. Subsequently, it increased to 11% in 1994 and 1995, and then there were shocks from 1996 to 2006. However, since 2007, there has been a gradual increase in financial development from 12% to 16% in 2020.

In Fig. 17.2, we present the trend of export and import in Africa from 2005 to 2019. One can observe that despite experiencing some fluctuations in value from 2005 to 2019, export and import have mainly been on an upward trajectory.[2] Nevertheless, Africa's global share in world trade has remained steady, accounting for roughly 3% of global exports and imports. African trade is heavily influenced by external and macroeconomic factors, with exports declining sharply during the 2008–2009 financial crisis and again from 2012 to 2016 due to falling oil prices and mineral product trade.[1] Moreover, there exist notable disparities in economic development levels both between African countries and between Africa and developed nations.[3]

Africa's exports are primarily upstream products, resulting in reduced demand from major developed and emerging economies during the COVID-19 pandemic. Consequently, the continent's economic recovery is contingent on the recovery of production and trade with its major partners, such as the European Union and China.[1] While intra-African trade has grown to 15.4% in recent years, the continent remains heavily reliant on Asia and Europe as primary trade partners.[2] African countries face several challenges, including a heavy dependence on primary goods for trade, limited regional production networks, and a high concentration of exports in specific markets and products.[2]

[2] "https://www.wto.org/english/res_e/booksp_e/strengthening_africas_ch_03_trends_in_trade_in_africa_e.pdf"

[3] "https://unctad.org/publication/key-statistics-and-trends-regional-trade-africa#:~:text=Currently%2C%20Africa%20accounts%20for%202.9,well%20as%20among%20African%20countries"

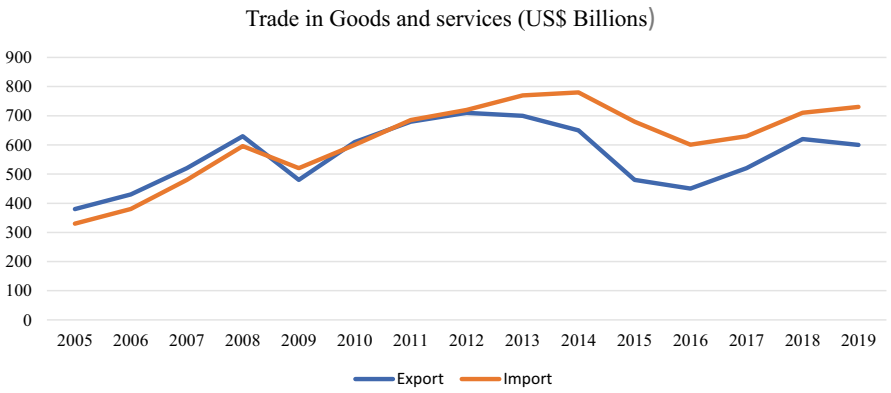


**Fig. 17.2** Trends in trade for Africa, 2005–2019. (Source: Authors analysis based on data from UNCTAD and WTO Trade Statistics, 2020)

## 17.3 Relationship and Causality Between Financial Development, Trade, and Economic Growth

This section explores the interrelationship between financial development, trade, and economic growth.

Over the past few years, international trade and financial markets have become more interconnected. Considerable emphasis has been devoted to examining the empirical link and causation between financial development and trade. Several empirical studies have developed in response to the theoretical prediction made by Blackburn and Hung (1998) that economic growth is positively influenced by both financial development and trade liberalization. While studies with a developed country focus seem to support this assertion, the key question has been whether this is also true for developing countries.

In their study, Caporale et al. (2022) examined the direct impact of financial development on trade flows, trade balance, and trade openness. Additionally, they explored the indirect influence of financial development through its interaction with sectoral value in the manufacturing and agriculture sectors. The study found that the direct effects and the indirect effects were positive and significant and is bidirectional. However, in the view of Wajda-Lichy et al. (2022), the causal relationship between financial development and trade is country specific. Leibovici (2021) conducted a study that examined the effects of financial development on international trade at both the industry-specific and aggregate level. The findings of this study provide empirical evidence that underscores the significance of financial development in facilitating international trade, both at the firm-specific and industry-wide levels.

On the channel through which financial development influences trade, Gianturco (2001) opine that financial development promotes trade by providing loans, insurance, and other financial services. According to Kletzer and Bardhan (1987) as well as Beck (2002), nations possessing a somewhat

advanced financial system have a comparative advantage in industries and sectors that heavily depend on foreign finance, such as manufacturing sectors. Financial development drives trade through improvements in the supply of capital to trade industry sectors with high efficiency and great potential. Financial development also facilitates the allocation of social resources efficiently and improvements in technological innovations in order to make products and services more competitive (Bunje et al., 2022). Another channel through which financial development drives trade is through economies of scale. Firms in the trade sector using intensive capital technologies, facilitated through credits from the financial sector, benefit significantly from economies of scale.

Economies of scale yield cost reductions, confer competitive advantages, facilitate market share expansion, and contribute to profit augmentation. Xinzhong (2022) presents empirical data supporting the notion that economies pursuing financial development may effectively reduce the financing costs associated with economies of scale. This finding highlights the significant role played by financial development in shaping international trade dynamics. Kim et al. (2010) examined the question of whether there exists a complementing or substitutive relationship between financial development and trade openness. The researchers examined the short- and long-term associations between financial development and trade openness in a sample of 87 countries, including both OECD and non-OECD nations. The findings of the study indicate that, within the aggregate model, there exists a long-term complimentary relationship between financial development and trade openness, whereas in the short term, these two factors exhibit substitutive interactions. The observed impact, however, is solely evident within the non-OECD nation category when the sample is segregated into groups based on OECD and non-OECD countries.

There is a lack of empirical information that offers insights into the relationship between financial development and trade, particularly in the context of Africa. In their study, Sare et al. (2019) conducted an examination of the correlation between financial development and trade in a sample of 46 African nations. The authors investigated the potential impacts in both the short-term and long-term contexts. The findings of the study indicate that the growth of the banking sector, which is a component of financial development, does not have a significant influence on international trade. Yakubu et al. (2018) conducted research that examined the influence of financial development on international trade within the African setting, utilizing data from 46 African nations. The study applied two indicators as proxies for financial development; nonetheless, the findings yielded conflicting outcomes. One aspect of the research reveals that private lending has a negative influence on international trade. In contrast, domestic credit has shown favourable impacts on trade. Moreover, it is observed that there exists a U-shaped correlation between private credit and trade, indicating that the growth of the financial sector might potentially hinder trade in countries with limited private credit while facilitating trade in economies with abundant private credit. Another study conducted by Gries et al.

(2009) did not find any statistically significant correlation between financial development and trade openness in a sample of 16 sub-Saharan African nations.

The study conducted by Menyah et al. (2014) aimed to examine the causal link between financial development and economic growth within a framework that incorporates international commerce in 21 African nations. The study's findings indicate that the influence of financial development and trade liberalization on economic growth is not statistically significant. In a study conducted by Katircioglu (2012), an examination was made into the enduring and causative connection between financial development, international trade, and economic growth within a selection of sub-Saharan African nations. The findings indicate a significant and enduring relationship between financial development, international trade, and economic growth. Through the process of inference, it can be asserted that the proposition stating that the progress of sub-Saharan Africa is propelled by finance and commerce is affirmed.

## 17.4 Conditions/Mechanisms Through Which Financial Development Drives Trade

An emerging body of research is also investigating the transmission mechanisms through which financial development influences international trade. The relationship between financial development and international trade has been established through multiple paths. These have been divided into two categories: macroeconomic and microeconomic. Scholars such as Beck (2002) and Kletzer and Bardhan (1987) have posited that nations with robust financial markets have a comparative advantage in the production of superior products and services that necessitate substantial foreign financial inflows. In principle, nations with high financial development generally have a positive balance of trade in the exportation of credit-intensive goods, predominantly consisting of manufactured commodities. Conversely, countries that export goods with low financial intensity are those that have minimal dependence on foreign capital. In order to establish a presence in foreign markets, manufacturing firms are required to allocate funds for various upfront expenses, including fixed production costs, shipping charges, consumer demand research, and distribution network installations. Manufacturing firms have the option to finance these expenditures through either operational cash flows or foreign capital inflows. In financial markets that are characterized by lower levels of development, both internal and external sources of finance may not be seen as the best alternatives. According to Melitz (2003) and Chaney (2016), an improvement in financial development might lead to companies eliminating financial obstacles and covering the costs associated with entering the export market.

The expansion of financial and digital innovations is also seen as a crucial government policy instrument in international commerce. According to Guo and Shen (2019), the digital economy plays a crucial role in enhancing the operations of markets and financial institutions. It achieves this by providing

more operational flexibility and enabling improved disclosures of financial risks. These advancements are essential for ensuring the successful functioning of the financial sector. An additional advantage of the digital economy is the enhanced collection of data, which may be utilized to more accurately assess the creditworthiness of applicants and facilitate trade finance (Pradhan et al., 2018). The study conducted by Bunje et al. (2022) examined the impact of the digital economy on the relationship between financial development and trade in 47 African nations during the period of 1990–2019. The findings of the study, utilizing the dynamic system GMM technique, indicate that the digital economy serves as a significant conduit via which financial development impacts trade in Africa over both the short and long terms. The research further revealed that the marginal impact experiences an increase when there is an interaction between financial development and the digital economy. The study conducted by Abeka et al. (2022) examined the impact of institutional frameworks on the correlation between trade openness and financial growth in the sub-Saharan African region. The results suggest that the impact of trade openness on financial development in sub-Saharan African nations is positive and statistically significant. Still, this benefit may be further enhanced by the existence of well-functioning institutions.

## 17.5 Benefits and Risks of Opening Up Financial Sector and Trade Simultaneously

The liberalization of a nation's financial sector and trade has the potential to yield benefits as well as drawbacks for its economy. On the one hand, liberalization can lead to increased competition, efficiency, and growth. Historically, proponents of free trade, like Adam Smith, assert that international trade is a positive sum game, because all parties of the trade transaction benefit and realize positive gains. On the other hand, liberalization can lead to income inequality, capital flight, and the displacement of domestic industries. It is therefore essential to carefully consider the potential benefits and risks before embarking on the process of liberalization, and to implement appropriate regulations and monitoring mechanisms to minimize the risks and maximize the benefits. In this context, this discussion will examine the benefits and risks posed to an economy as a result of opening up its financial sector and trade simultaneously.

### *17.5.1 Benefits Associated with Opening Up the Financial Sector and Trade Simultaneously*

***Increased foreign investment***: Opening up the financial sector and trade can attract foreign investors who are interested in investing in the economy. This can lead to an inflow of capital, which can help finance economic growth. China started the process of liberalizing its financial sector and expanding its

commerce throughout the latter part of the 1970s and the early years of the 1980s. Consequently, it garnered substantial levels of international investment in the next years. Based on statistics provided by the United Nations Conference on Trade and Development (UNCTAD), the inflow of foreign direct investment (FDI) into China had a notable growth trajectory, rising from around $1 billion in 1983 to above $139 billion in 2019. During this time frame, China emerged as a prominent global recipient of foreign investment, as shown by the United Nations Conference on Trade and Development (UNCTAD, 2020). This increase in foreign investment has helped finance China's economic expansion, which has been one of the fastest in the world over the past few decades. The inflow of foreign capital has helped to finance investments in infrastructure, manufacturing, and other sectors of the economy, which have helped to drive economic growth.

***Improved access to credit***: Liberalizing the financial sector can increase competition among lenders, which can lead to better access to credit for businesses and individuals. This can help spur economic activity and promote entrepreneurship. For instance, the World Bank (2016) showed that the financial sector reforms in Mexico, implemented between 1997 and 2013, aimed to increase competition among lenders and expand access to credit, and had a significant positive impact on both businesses and individuals (World Bank, 2016). The reforms led to increased credit availability for businesses, which, in turn, led to higher investment and employment. For individuals, the reforms led to increased access to consumer credit, enabling them to purchase durable goods and improve their standard of living. Moreover, the study found that the impact of the reforms was more pronounced in areas with initially lower levels of access to credit, suggesting that the reforms helped to reduce the gap in access to credit between different regions of the country. Similarly, in Ghana, financial sector reforms implemented between 2001 and 2012 enhanced access to credit for businesses and individuals, as reported by the African Development Bank (2017). The reforms led to increased credit availability for businesses, which, in turn, led to higher investment and employment. According to the African Development Bank (2017), the changes improved people's access to consumer credit, allowing them to pay for their own housing, health care, and education costs.

***Enhanced specialization***: The expansion of trade can facilitate an economy's specialization in the production and exportation of commodities and services in which it possesses a comparative advantage. This can lead to greater specialization and efficiency in production, enhancing economic growth. For example, a study by the World Bank (2019) revealed that increased trade had led to significant gains in efficiency and productivity, particularly in the manufacturing sector. This was attributed to increased specialization, as the country had focused on producing and exporting goods in which it had a comparative advantage, such as textiles and electronics. This specialization had led to significant growth in employment and wages in the manufacturing sector, as well as increased investment in technology and innovation (World Bank, 2019). The

research analysed the effect of trade liberalization on the Vietnamese economy between 2007 and 2017.

***Increased competition***: The liberalization of the trade sector can increase competition among businesses, leading to lower prices for consumers and greater efficiency in production. This can stimulate economic growth and development. Rajan and Zingales (2003) conducted an empirical study that provides support for the proposition that when an economy engages in liberalizing trade and capital flows, it is probable that it will reap benefits from both. This is because such liberalization can foster competition and pose challenges to the entrenched interests of existing market participants. In Morocco, liberalization had led to increased competition among businesses, particularly in the manufacturing sector. This had led to greater efficiency in production and lower prices for consumers, as businesses sought to improve their competitiveness. This is documented in an empirical study by the IMF (2019) that used annual data from 1993 to 2013 to examine the effect of trade liberalization on the Moroccan economy. It was found that increased competition had also led to greater innovation and technological development, as businesses sought to differentiate themselves from their competitors (IMF, 2019).

### *17.5.2 Risks Associated with Opening Up the Financial Sector and Trade Simultaneously*

***Unequal distribution of benefits***: The potential consequences of liberalizing the financial sector and trade include a possible exacerbation of income inequality, particularly if the benefits of increased economic growth are not equitably distributed among all segments of the population. For example, India experienced higher income inequality as the income gap between the top and bottom income quintiles widened significantly, with the top 10% of earners capturing a disproportionate share of the gains (Agarwal, 2008). The study by Agarwal (2008) focused on the impact of trade liberalization and financial sector reforms on income inequality in India between 1993 and 2011. Moreover, the study found that while access to credit did increase, it was primarily accessed by higher-income groups, exacerbating existing income disparities. The financial sector reforms were also found to have led to a concentration of banking assets in a few large banks, reducing competition and contributing further to unequal access to credit (Agarwal, 2008).

***Risk of capital flight***: Liberalization of the financial sector can make it easier for investors to move their capital in and out of the economy, which can lead to an increased risk of capital flight during times of economic uncertainty. Africa has experienced capital flight as the continent has opened up its financial sector and trade. For instance, in Nigeria, the liberalization of the financial sector has led to increased opportunities for capital flight, as investors have been able to move their capital in and out of the economy more easily (AfDB, 2018). During times of economic uncertainty, such as periods of recession or political instability, this has led to significant outflows of capital from the country, which

have undermined the stability of the financial sector. The liberalization of the financial sector has also contributed to a concentration of wealth among a small group of individuals, which has further exacerbated the risk of capital flight (AfDB, 2018).

***Threat to domestic industries***: Increased competition from foreign firms can pose a threat to domestic industries, particularly if they are not able to compete on price or quality. This phenomenon has the potential to culminate in high unemployment rates and a deterioration in economic competitiveness. The solar panel industry in the United States has been facing tough competition from foreign firms, particularly from China.[4] Chinese firms have been able to produce solar panels at much lower costs than American firms due to lower labour and production costs. As a result, many American solar panel manufacturers have struggled to compete, leading to job losses in the industry.

In conclusion, the simultaneous liberalization of the financial sector and trade can yield considerable advantages for an economy. However, it also carries inherent risks that need to be taken into account. By implementing meticulous planning, regulation, and monitoring, it is possible to optimize the benefits while mitigating the risks.

## 17.6 Concluding Remarks

The foregoing discussion suggests a number of things. The existing body of empirical research on the link between financial development and trade has predominantly concluded that there is really an association between these two variables. The available data strongly indicates that financial development significantly contributes to the facilitation of international trade by increasing export volumes, fostering technical advancements, and enhancing the overall trade structure. However, this notion is ambiguous in the case of sub-Saharan Africa. While several research studies support the hypothesis that the economic growth of sub-Saharan African countries is influenced positively by both financial development and trade, other studies present contrasting evidence indicating a negative association between financial development and trade. However, other research findings indicate that the influence of financial development and trade on economic growth has been limited.

Nonetheless, there are significant benefits that an economy stands to gain from opening up its financial sector and trade. The preponderance of evidence presented in this chapter indicates that the development of the financial sector has the ability to facilitate the operations of local enterprises by providing them with access to capital. Moreover, it is plausible that foreign participation and competition may potentially lead to a reduction in the costs associated with international trade. In particular, within the context of developing economies in Africa, where the available evidence is limited, it is imperative to adopt and

[4] "https://www.bloomberg.com/news/articles/2021-06-04/solar-jobs-2021-how-china-beat-u-s-to-become-world-s-solar-champion"

implement policies that foster financial development and facilitate economic integration both within the region and with the global market. These measures are vital for promoting long-term and sustainable growth and development. While aiming to enhance financial development, it is crucial to prioritize finance-intensive export industries that exhibit increasing returns to scale.

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PART V

# Emerging Issues

CHAPTER 18

# Foreign Direct Investment and International Trade in Africa

*Elikplimi Komla Agbloyor, Joseph Dery Nyeadi, Pieter Opperman, and Boakye Dankwah*

## 18.1 Introduction

In the last two decades, the growth in foreign direct investment (FDI) and international trade has been a key factor shaping world economic integration and development. Globalization and the integration of economies are major steps in promoting FDI and international trade. After the initiation of economic liberalization in 1991, many governments amended their policies to encourage increased capital flows and trade. Particularly, the surge in the liberalization of trade laws, advancement in technology, and internalization today have encouraged capital flow and inter-trading across countries. The Economic Recovery Programme (ERP) and the Financial Sector Adjustment Programme (FINSAP) adopted by developing countries were purposely enrolled to

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_18

strengthen their financial and economic systems and to promote capital flow and trade.

FDI and international trade are the main features of modern globalization. FDI refers to the investment made by a company or an individual from one country in a business or company located in another country. This investment can take different forms, such as acquiring a foreign company, establishing a new business in a foreign country, or expanding an existing business in a foreign country. FDI can take different forms; *Horizontal FDI* which involves a company establishing a business that manufactures products and services in a foreign country similar to those it produces in its own country; *Vertical FDI* which is the investment made in a different business in a foreign country but is related to the investor's main business activities; *Conglomerate* which is when the FDI is not linked directly to the investor's core business. We can also categorize FDI into *Market-Seeking*, which is undertaken to gain access to new markets or to increase the company's market share in existing markets, *or Resource-Seeking FDI* which is undertaken to acquire access to natural resources, such as raw materials, energy, or other natural resources. Quintessential to FDI is not the transfer of funds, but the managerial control established through the transfer of the fund. Foreign capital flow is only considered FDI if it establishes long-lasting managerial control. A lasting interest or control is established when an investor obtains at least 10% of the voting power in a firm.

International trade, on the other hand, refers to the exchange of goods and services across international borders. Trade allows countries to grow beyond the capacity of their domestic markets and allow them to facilitate the flow of goods, services, and technologies that otherwise may not have been possible. International trade involves *import trade*, which is the purchase of goods and services from foreign countries, and *export trade*, which is the selling of goods and services produced in one country to customers in another country. Countries often have bilateral trade agreements where they exchange goods and services with explicit terms and conditions of trade.

In recent years, FDI flow has increased significantly and trade has increased as well, especially in emerging economies. Various factors such as bilateral investment and trade treaties have contributed to this rise. However, the relationship between FDI and trade is not that simple. FDI and trade may have different relationships depending on the jurisdiction under consideration. As seen in Fig. 18.1, FDI flows and trade started sluggishly in the 1960s and 1970s but boomed in 2000 and have increased heavily ever since. It is apparent from the chart that FDI flows globally vacillate more than trade. For example, in 1970, global FDI flows were estimated at $11.9 billion, which increased to $2.2 trillion in 2021. The global FDI flows rose heavily in 2007 surpassing the peak in 2000. During this period the developing countries and transition economies (the largest are Brazil, Russia, India, and China) experienced a rise in FDI flows (Lane & Milesi-Ferretti, 2018). The chapter also observed the impact of global crises on foreign direct investment (FDI) and trade. During periods of crisis and uncertainty, such as the 2001 September attack, the

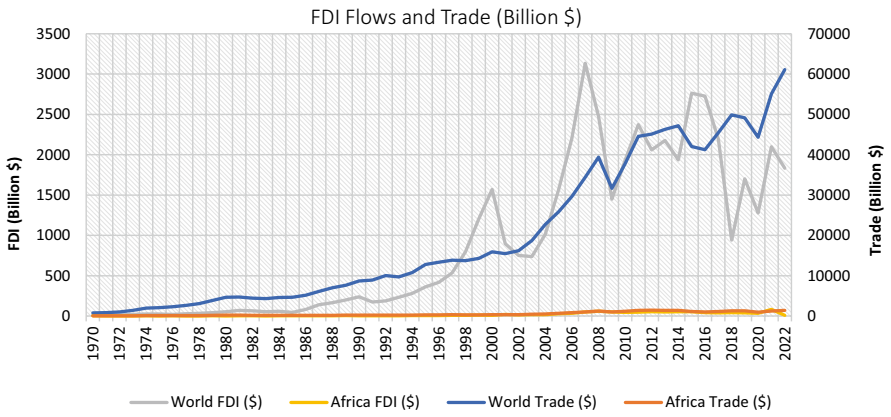


**Fig. 18.1** FDI flows and trade from 1970 to 2021. (Source: Authors' Construction, World Bank Data)

2008/2009 global financial crisis, and the 2021 COVID-19 pandemic, FDI flows and trade have shown a decline. Figure 18.1 visually represents that Africa's share of the global FDI and trade flows is relatively low. However, there has been gradual progress in these numbers over the years. For instance, looking at the historical data, we see that in 1970, Africa's total trade (imports plus exports) amounted to $32.27 billion, with FDI net inflow at $1.25 billion. Fast forward to 2021, and these figures have improved significantly to $1425.10 billion for total trade and $9.41 billion for FDI net inflow. This indicates a notable advancement in terms of both FDI flows and trade activities within the region.

## 18.2 Trends of FDI and Trade in Africa: Stylized Facts

There are 54 recognized countries in Africa, each with its own unique history, culture, and economic landscape. Many African countries have experienced significant economic growth in recent years, driven in part by natural resource extraction and investment in sectors like technology, agriculture, and tourism. Trade and capital flows to Africa are an important aspect of the continent's economic development. In recent years, Africa has seen an increase in both FDI and trade, with several countries making significant efforts to attract foreign investment and develop their export industries. This section discusses facts and figures about the growth and trend in FDI and trade in Africa and the sub-regional share in this.

### *18.2.1 Growth in FDI Flows and Trade in Africa*

We extracted the FDI and trade data from the World Bank database to keep a tab on the growth in FDI and trade in Africa vis-a-vis the globe. The data shows that the FDI flows and trade in Africa are positive despite the dwindling periods. We show that FDI and trade in Africa hinge on global FDI flows and international trade.

Figure 18.2 shows FDI flows rose heavily in the early 1980s (about 396% growth in FDI), the period when most African countries embraced the financial liberalization programs of the World Bank. It is obvious that these policies paved the way for the acceleration of FDI flows in Africa.

FDI flows in Africa have been wavering between 1970 and 2020, with 1981 recording the biggest increase and 1989 experiencing the biggest drop. In dollar terms, FDI in Africa increased by 1.5 billion dollars in 1981. Over the past two decades, the region has experienced an average growth rate of 16.4%, which is encouraging compared to 9.2% globally. The investment flow to Africa as a percentage of global FDI flows is between 1% and 6%. In 2021, investment flows to Africa accounted for only 3% of global FDI in 2020 and 4% in 2021. The FDI flow to African countries hit a record 83 billion US dollars in 2021. The region has received a total of 968.69 billion US dollars in FDI since 1970.

Trade, on the other hand, experienced the greatest growth between the 1970s and 1980s. These periods mark the beginning of trade liberalization and treaties between African countries and Western countries. It is not surprising to observe such a heap in growth in FDI and trade during this period. While the growth rate of trade in Africa is not identical to that of FDI, it is evident that they share a comparable trajectory. Moreover, the growth in trade within the region closely mirrors that of the global trend, unlike the FDI which seems to be moving in opposite way with the flows in the world. The largest traders with African countries and senders of FDI are from European countries. The

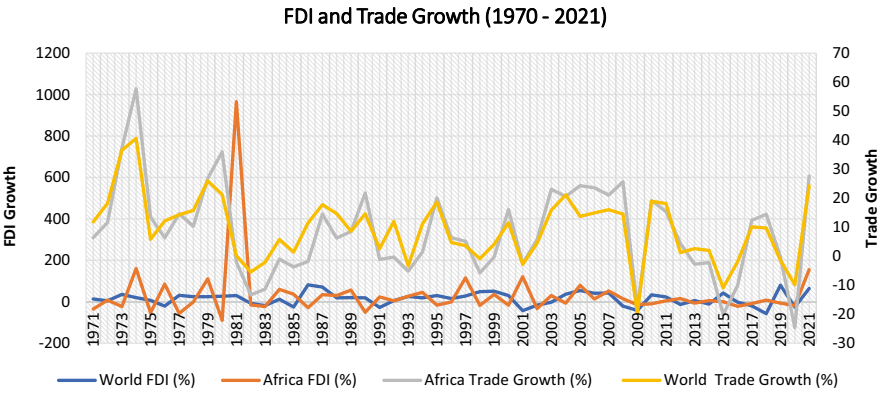


**Fig. 18.2** Growth trends in FDI and trade in Africa. (Source: Authors' Construct; World Bank Data)

fluctuation in FDI and trade in Africa is dragged by many factors which will be discussed later in this chapter.

### *18.2.2 Sub-regional Share of FDI and Trade*

The various sub-regions and economic zones in Africa have experienced different levels of FDI flows. Figure 18.3 shows the total FDI net inflows to the sub-regions and economic zones in Africa from 1970 to 2021. The Northern Africa region tops in terms of FDI flows, followed by Western Africa, Eastern Africa, Southern Africa, and Central Africa being the least.

In terms of sub-regional exports and imports, it is shown (Fig. 18.3) that the trade balance in Southern Africa is benign. In Fig. 18.3, we aggregated the total exports and imports by the sub-regions from 1980 to 2021 using the World Bank data. North Africa is the largest trader in the region with a high value of exports and imports. In dollar terms, the North African countries have exported and imported more than other sub-regions on the continent from 1980 to 2021. However, Northern Africa has a larger trade imbalance than the other regions. The trade imbalance is mild for Southern and Central Africa. Southern Africa in particular has greater exports of diversified manufactured goods in addition to refined oil and iron. In the Southern region, South Africa

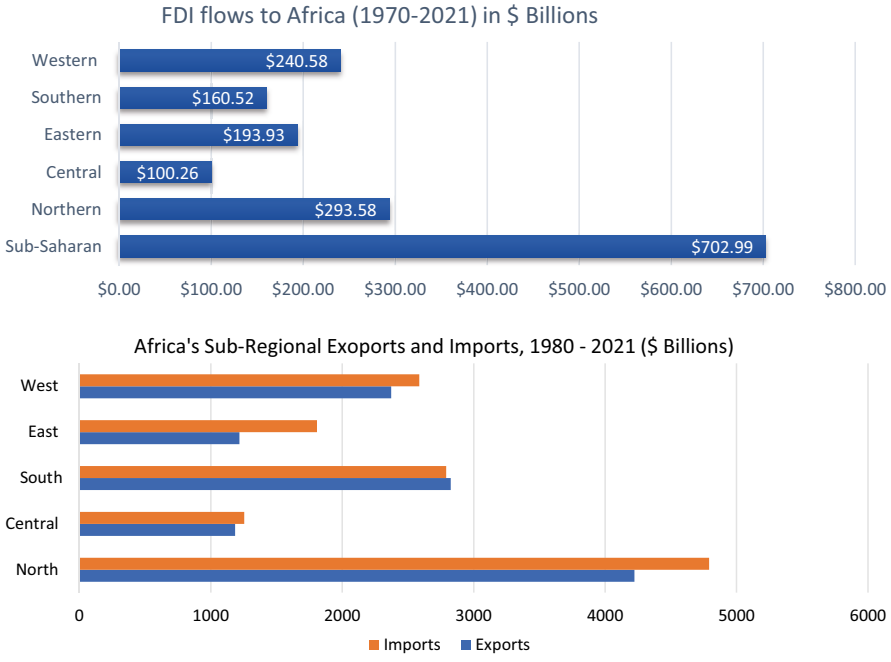


**Fig. 18.3** Regional distribution of FDI and trade flows in Africa. (Source: Authors' Construct; World Bank Data)

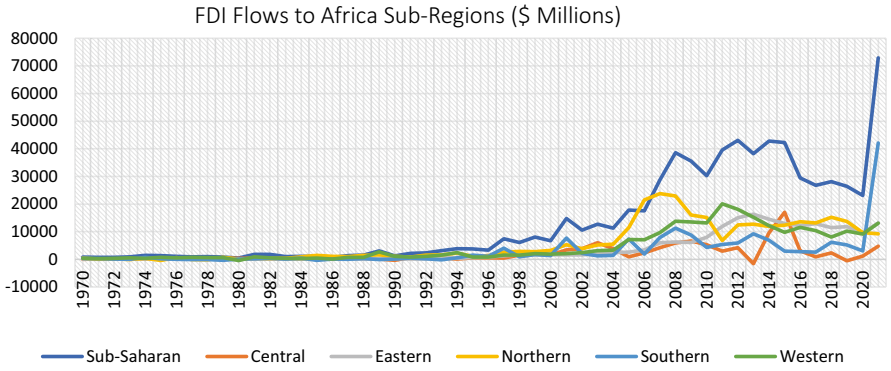


**Fig. 18.4** Trend of FDI flows to the sub-region in Africa. (Source: Authors' Construct; World Bank Data)

has been a major exporter of goods and services (goods and services) to sister African countries and outside Africa.

The trend plot shows that while North Africa has been the largest recipient of FDI over the years, the level of FDI flows has dwindled in recent years. We have seen a jump in the FDI flows to the Southern Africa region in recent years (Fig. 18.4).

### *18.2.3 Trade in Africa*

Since achieving independence, many African countries have made attempts to diversify trade relations. Trade in Africa as a whole has grown only modestly in recent decades, expanding from 36% of GDP in 1986 to 45% in 2021. Africa's trade rose dramatically between the years 2000 and 2013 (see Fig. 18.5). According to data from the World Bank, Africa's total merchandise trade increased from $333.6 billion in 2000 to $997.9 billion in 2019, representing a 198% increase over the period. Figure 18.5 shows that the volume of trade in Africa as a percentage of its GDP was high in the 1970s. This was due to the increase in the demand for primary commodities during World War II and in the immediate postwar II reconstruction period. An important factor that also boosted Africa's trade was the growth of exports attributable to the discovery of petroleum in several countries, notably Libya, Algeria, Nigeria, Gabon, Angola, the Republic of the Congo, and Cameroon. Despite the improvement in Africa's trade, the region accounts for a low share of total global trade and production. In 2020, the region contributed to 2.9% of the global production and accounted for 2.5% of the world's trade. This figure highlights that Africa's share of global trade remains low, consistently remaining below 6% for decades. The data from the World Integrated Trade Solution (WITS) (shown in Table 18.1) shows that African major trading partners for exports are China,

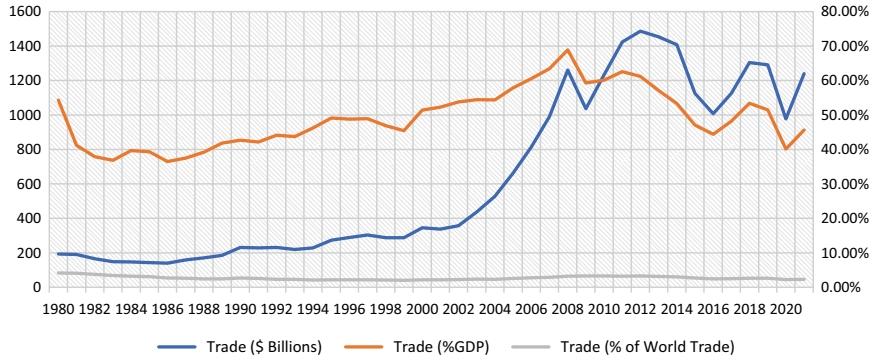


**Fig. 18.5** Trend of trade in Africa from 1980 to 2021. (Source: Authors' Construct, Data from World Bank Database)

India, the United States, Germany, France, and the United Kingdom and imports are China, South Africa, the United States, India, and Germany.

*Intra- and Extra-Trade in Africa*

Historically, intra-African trade has been low. Intra-Africa trade refers to the exchange of goods and services between African countries. Most African countries trade more with countries outside the continent than with their African neighbors as shown in Fig. 18.6. Let's take a look at the extra- and intra-trade among the sub-regions in the world (Fig. 18.6). The figures in 2022 are not far from the truth that Africa has fewer intra-trading activities compared with other parts of the world. This has been due to a number of factors including poor infrastructure, tariff barriers, non-tariff barriers, and limited economic diversification. According to the Inter-Trade Africa Fair (ITAF), lack of access to cross-border trade and market information is the key reason for the low level of intra-African trade. Although the share of intra-African trade as a percentage of total African trade has increased from 10% in 1995 to about 15% in 2020, it remains low compared to the levels in Europe (67.1%), Asia (60.5%), North America (23.3%), and Latin American & Caribbean (14.8%). Intra-African trade involves both primary and manufactured products.

Even within Africa's four largest regional trade blocs—Southern African Development Community (SADC); East African Community (EAC); Economic Community of West African States (ECOWAS); and Central African Economic and Monetary Community (CEMAC), the trade volume is low. In 2021, Intra-bloc exports within the SADC (US$44.3 bn) constituted 18% of member states' total exports (US$245.6 bn); within EAC (US$7.2 bn) constituted 14.5% of member states' total exports (US$49.7 bn); within ECOWAS (US$12.7 bn) constituted 11.2% of member states' total exports (US$113.6 bn); within CEMAC (US$585.1 m) constituted 2.5% of member states' total exports (US$23.1 bn). The intra-bloc imports within the SADC (US$36.1 bn) constituted 18.7% of member states' total imports (US$193.5 bn); within the

**Table 18.1** Major Africa trade partners

| *Major seven import partners* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Partner* | *2021* | *2020* | *2019* | *2018* | *2017* | *2016* | *2015* | *Total* |
| China | 57,420.81 | 54,797.71 | 57,544.42 | 55,581.01 | 49,774.22 | 47,526.24 | 54,286.42 | 376,930.83 |
| India | 22,914.43 | 18,739.70 | 21,816.70 | 18,638.87 | 17,018.50 | 16,971.05 | 19,010.42 | 135,109.67 |
| The United States | 15,544.87 | 15,500.25 | 19,010.19 | 18,017.91 | 16,798.68 | 17,089.84 | 19,231.79 | 121,193.53 |
| Germany | 11,697.65 | 10,935.69 | 13,535.92 | 14,024.26 | 14,869.47 | 14,069.59 | 14,612.76 | 93,745.34 |
| France | 8919.11 | 9193.28 | 7890.29 | 11,152.09 | 10,910.59 | 11,562.25 | 11,201.67 | 70,829.28 |
| The United Kingdom | 5278.46 | 5314.44 | 7741.37 | 8125.00 | 7366.22 | 8347.64 | 8680.32 | 50,853.45 |
| Major seven export partners | | | | | | | | |
| Partner | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | Total |
| China | 53,688.14 | 39,785.59 | 48,313.76 | 52,511.68 | 40,754.83 | 27,917.74 | 29,935.66 | 292,907.40 |
| India | 19,876.91 | 13,505.64 | 23,762.14 | 27,159.39 | 23,357.63 | 16,853.19 | 21,379.43 | 145,894.33 |
| The United States | 17,961.79 | 11,717.10 | 14,161.04 | 16,283.86 | 17,884.04 | 14,643.61 | 12,864.14 | 105,515.58 |
| The Netherlands | 9403.62 | 9287.68 | 12,178.78 | 15,428.98 | 11,329.97 | 8940.57 | 14,128.00 | 80,697.61 |
| Switzerland | 10,857.69 | 11.36 | 11,348.65 | 11,752.06 | 10,993.18 | 10,800.39 | 9809.91 | 65,573.25 |
| Germany | 11,406.82 | 8279.95 | 9987.96 | 9945.20 | 8339.96 | 7813.42 | 8014.18 | 63,787.49 |
| The United Kingdom | 10,888.78 | 7040.53 | 8061.29 | 10,330.66 | 7366.22 | 6733.99 | 8528.27 | 58,949.75 |

Source: Authors' Construct World Integrated Trade Solution Data, 2023

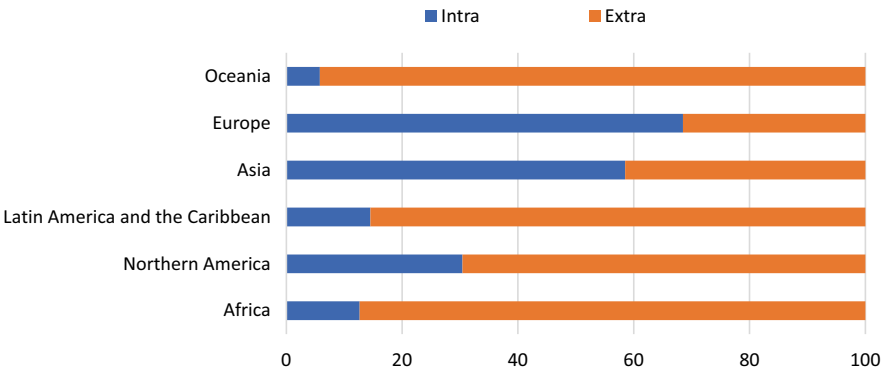


**Fig. 18.6** Intra- and extra-regional trade as of 2022. (Source: Authors' construct; UNCTAD Data, 2023)

EAC (US$5.7 bn) constituted 9.4% of member states' total imports (US$61 bn); within ECOWAS (US$12.9 bn) constituted only 10% of member states' total imports (US$128.9 bn); within the CEMAC region (US$407.3 m) constituted just 2.7% of member states' total imports (US$15.1 bn). The intra-trade within the Southern Africa Development community is better than the other trade blocs. The top intra-Africa exporters ranking by country shares in 2020 were South Africa (32%), Nigeria (10%), DRC (8%), Egypt (6%), Zimbabwe (4%), and for the rest of Africa (40%). Intra-African trade records however frequently understate the amount of trade—partly because of the lack of adequate statistics and partly because of the high rate of smuggling, which allows a substantial amount of traditional border trade to continue unrecorded. The African Continental Free Trade Area (AfCFTA) established in 2018 aims to increase intra-African trade by creating a single market for goods and services across the continent. The AfCFTA is projected to be a game changer, stimulating trade in the region.

*Africa Trade Balance*

African countries' import-export data contains record-by-record shipment details, which reveal the import and export activities of businesses and individuals in Africa. Africa's imports overwhelm its exports as most countries in Africa import more than they export (see Fig. 18.7). African countries' imports are consistently higher than the exports creating a trade imbalance for the region. This can be attributed to several factors such as a lack of diversification in their economies, a heavy reliance on commodity exports, inadequate infrastructure, and limited value addition to raw materials. The volume of negative trade balance in Africa has increased in the recent decade compared with the nineteenth century and Post War II period. Africa's imports and exports stood at $94.7 billion in 1980 and $98.7 billion in 1980, respectively, a positive trade balance. However, in 2021, the imports and exports stood at $652 billion and

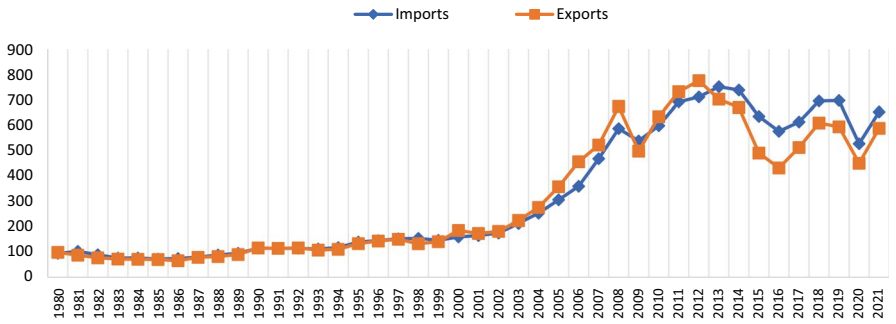


**Fig. 18.7** Imports and exports of goods and services in Africa. (Source: Authors' Construct; World Bank Data)

$587 billion, respectively, a negative trade balance. Africa's import bill is high due to the high demand for finished goods, capital equipment, and technology can also be said as another reason for this long-standing trend in the continent.

## 18.3 What Drives FDI and Trade in Africa?

As aforementioned FDI and trade are key economic indicators that contribute toward the growth and development of economies in Africa. Considering their huge importance, it is imperative to stress the factors that drive these two indicators so that policymakers and other relevant stakeholders can be informed on actions they can take in their capacities to trigger massive improvements in FDI and trade in the region.

1. **Natural resources:** Africa is rich in natural resources such as minerals, oil, and gas. The availability of these resources attracts FDI and drives trade, as foreign companies seek to access and extract these resources for export. For instance, foreigners have set up mining companies in the region to obtain these natural resources and most African countries get a lot of foreign exchange through trading their minerals. Obviously, countries with more natural resources are likely to experience massive improvements in FDI and trade (Sichei & Kinyondo, 2012).
2. **Economic growth and market potential:** Africa has experienced significant economic growth in recent years, and it is projected to continue growing in the future. The continent's expanding middle class and growing consumer markets make it an attractive destination for FDI and trade. Several local businesses have been able to receive capital to grow and expand their operations from foreigners (Sichei & Kinyondo, 2012).
3. **Infrastructure development:** Adequate infrastructure is crucial for facilitating trade and attracting investment. Improvements in transportation, logistics, energy, and telecommunications infrastructure can boost FDI

and trade by reducing transaction costs and enhancing connectivity within and beyond Africa.

4. **Market liberalization and trade agreements:** African countries have been implementing market-oriented reforms, liberalizing their economies, and reducing trade barriers. Regional integration initiatives such as the African Continental Free Trade Area (AfCFTA) create larger markets and opportunities for trade and investment (Zhang, 2022).
5. **Political stability and governance:** Political stability and a conducive business environment are vital for attracting FDI and promoting trade. Countries with stable governments, effective institutions, and transparent regulatory frameworks tend to be more attractive to investors.
6. **Demographic factors:** Africa has a young and growing population, which presents both opportunities and challenges. A large workforce can attract labor-intensive industries and spur FDI and trade. Additionally, the rise of the middle class and changing consumer preferences create new markets and trade opportunities.
7. **Sector-specific factors:** Certain sectors, such as agriculture, manufacturing, and services, hold significant potential for FDI and trade in Africa. Investments in agriculture can help address food security and promote agribusiness exports. Manufacturing can contribute to industrialization and export diversification, while services, including tourism and telecommunications, offer growth potential (Zhang, 2022).

## 18.4 Effects of FDI and Trade in Africa

### *18.4.1 Economic Benefits of FDI and Trade*

Economic benefits of FDI include technology spillovers and the introduction of improved management techniques. FDI can enable the development of a more competitive business environment. FDI enables domestic firms to add value to their products and services which should further translate into greater participation in regional and global trade. One of the key economic benefits of FDI to recipient countries is that innovation either process or product innovation is enhanced with their inflow of FDI. Nyeadi and Adjasi (2020) argue that FDI is able to spur innovation as FDI causes parent groups to transfer some superior knowledge to host firms by way of staff exchanges or secondments. FDI flows increase the capital level of host firms thereby making the firms financially sufficient to undertake research and development and also be able to invest in machines and equipment needed for innovation (Ghazel & Zulkhibri, 2015; Khachoo & Sharma, 2016). On the contrary, some argue that foreign firms normally focus more on the short-term profit dimension due to the neglect of innovative activities which may take time to produce profit (Barasa et al., 2018; Garcia et al., 2013). Nyeadi and Adjasi (2020) found that FDI positively influences firm innovation in Nigeria but has no impact on firms in

South Africa. They concluded that context plays a crucial role in the FDI innovation nexus. They further contended that FDI flowing from less technologically inclined nations to more innovative nations apparently yields no impact on the host nations. FDI productivity depends on a minimum level of human capital development and FDI productivity is enhanced through the existence of well-functioning domestic financial markets (Adjasi et al., 2012; Agbloyor et al., 2014). Other conditions necessary for host economies to benefit from foreign private capital flows are openness to trade, macroeconomic stability, good infrastructure, and strong domestic institutions (Agbloyor et al., 2016).

### *18.4.2 Social Benefits of FDI and Trade*

FDI could have direct and indirect social effects (Abor & Harvey, 2008). Direct employment could be created through the formation of foreign subsidiaries while indirect employment could occur through backward and forward linkages in the production process. The qualitative effects of FDI are related to the possible impacts on wages, job security, productivity, and skills (Abor & Harvey, 2008). Better job security could follow because MNCs are relatively larger in size and operate within a more competitive landscape, thereby requiring a stable workforce. MNCs can invest in training to upskill employees and influence stakeholders like industry associations and suppliers to provide additional training opportunities to meet quality standards.

The classic liberal theory posits that states that are economically interdependent are less likely to engage in militarized disputes because of concerns that foreign investment and trade are disrupted. According to Rosecrance and Thompson, possible hostility between states is not always reduced by trade interdependence. Bussmann showed that FDI inflow and stock reduce the risk of a start of a fatal dispute. Relatedly, Lee and Mitchell (2012) showed that the existence of higher bilateral flows between disputant countries significantly reduces the possibility of escalation and improves the chances for a peaceful outcome.

### *18.4.3 Environmental Benefits of FDI and Trade*

The relationship between FDI and the environment is contentious. The pollution haven hypothesis posits that MNCs participate in polluting behaviors in developing countries where environmental standards and compliance costs are lower (Bokpin, 2017). To attract additional FDI, developing countries subsequently intentionally undervalue their environment becoming pollution havens. When the environment is undervalued or considered free, an alteration in economic incentives occurs and overuse by consumers and producers arises. The literature commonly decomposes the effects of economic actions and trade on pollution into three properties: scale effect, composition effect, and technique effect (Hübler & Keller, 2010). FDI inflows can encourage the scale effect indirectly as FDI inflows spur economic growth that is related to more

energy use. FDI inflows can influence the composition effect if these flows assist in altering the sectoral structure of the economy. The technique effect concerns how the employment of new technologies or management practices impacts energy use. Mielnik and Goldemberg showed a decline in energy intensity as FDI increases. The authors hypothesized that the use of modern technology because of FDI "leapfrogs" older traditional technologies used in these countries. Relatedly, according to the neo-technical trade view, there is a positive link between FDI and the environment (Hassaballa, 2014). The pollution haloes hypothesis avers FDI having a positive influence on the environment through environmentally friendly techniques of production being transferred from developed to developing countries.

## 18.5 The Role of Government in Promoting FDI and Trade in Africa

One of the major stakeholders in influencing policy formulation and implementation with regard to FDI and trade in every country is the government. This implies that a country that enjoys good governance will reap many sociopolitical and economic benefits from FDI and trade. However, regions whose government is ineffective in regulating FDI and trade will eventually experience unfavorable macroeconomic conditions. Therefore, it is in the interest of every government in Africa to understand the measures they can implement to promote FDI and trade.

1. **Investment promotion and facilitation:** Governments can actively promote their countries as attractive investment destinations. This can involve marketing campaigns, investment forums, and engagement with potential investors. Additionally, governments can establish investment promotion agencies to provide information, assistance, and streamlined processes for foreign investors. This can help attract foreign investors and increase the visibility of the country as a viable investment location (Asiedu, 2006).
2. **Policy and regulatory framework:** Governments need to establish clear and transparent policies and regulations that support investment and trade. This includes creating a favorable business environment, ensuring ease of doing business, protecting property rights, and enforcing contracts. This may include reforms to the legal system, labor laws, and regulatory frameworks. Thus, tax incentives, import/export regulations, investment protection laws, and measures to reduce corruption and bureaucracy. Stable predictable and favorable policies reduce investment risks, attract FDI flows, and improve trade (Asamoah et al., 2019).
3. **Infrastructure development:** Governments play a vital role in developing and maintaining infrastructure, including transportation, energy, telecommunications, and logistics networks. Governments can invest in the development of infrastructure such as roads, railways, airports, and

ports. The adequate infrastructure reduces transaction costs, improves connectivity, and facilitates trade and investment activities (Asamoah et al., 2019).

4. **Trade facilitation:** Governments can streamline customs procedures, reduce trade barriers, and simplify trade regulations to promote efficient cross-border trade. Implementing trade facilitation measures such as single-window systems, harmonized customs procedures, and electronic documentation can enhance the ease of doing business and attract trade flows (Asiedu, 2006).
5. **Regional integration:** Governments can actively participate in economic and market integration initiatives. This may include regional trade agreements such as African Continental Free Trade Area (AfCFTA), bilateral trade agreements, and participation in international organizations such as the World Trade Organization. By promoting regional trade agreements, harmonizing regulations, and removing trade barriers, governments can expand market access, create larger economies of scale, and attract regional investments (Sakyi & Egyir, 2017).
6. **Investment incentives:** Governments can offer targeted incentives to attract FDI. This may include tax breaks, investment allowances, duty exemptions, and special economic zones. Incentives can be sector-specific or location-specific to encourage investment in priority industries or economically disadvantaged regions (Bokpin, 2017).
7. **Skills development and capacity building:** Governments can invest in education, vocational training, and skills development programs to enhance the labor force's competitiveness and attract investment in sectors that require skilled workers. Developing a skilled workforce aligns with the needs of investors and promotes sustainable economic growth (Sakyi & Egyir, 2017)
8. **Access to finance:** Governments can support the availability of financing for businesses, particularly small- and medium-sized enterprises (SMEs). This can involve establishing credit guarantee schemes, venture capital funds, or facilitating access to international finance and investment. By doing so, SMEs can secure the necessary funding to start or expand their businesses, which can boost economic growth and attract foreign investors. This can create more job opportunities, increase productivity in the country, and promote trade in the region (Sakyi & Egyir, 2017).
9. **Sector-specific support:** Governments can focus on specific sectors or industries with high growth potential. They can provide targeted support, infrastructure, research and development funding, and policies to stimulate investment and promote exports in these sectors. Governments can attract foreign investors and promote trade in areas where the country has a comparative advantage. This can lead to the growth of the

targeted sector, the creation of jobs, and increased foreign exchange earnings for the country (Bokpin, 2017).

10. **Public-private partnerships:** Governments can promote FDI flows and trade through public-private partnership arrangements with foreign companies or investors. By partnering with private companies, governments can access their resources, expertise, and networks to support investment and trade initiatives. PPPs can be particularly effective in infrastructure development, investment projects, and trade promotion initiatives. For example, a government can partner with a foreign private company to develop a new transportation infrastructure project, such as a port or airport, or to promote trade through joint marketing campaigns or trade missions. The PPPs may require the establishment of a unit by a foreign company in the country to facilitate the progress of the PPP. A common example in Africa would be the One-District-One Factory initiative by the Ghana government where the government partners with private companies to establish or expand its businesses.

## 18.6 Challenges of FDI and Trade in Africa

The current wave of globalization sweeping through the world has spurred FDI flows and trade among countries. It is broadly recognized that, while globalization has produced an impressive expansion in FDI and trade in the past three decades, the gains have not been fairly distributed. Despite the highly profitable opportunities in Africa, FDI flows and trade in the region are hampered by many factors. Some of these factors are macroeconomic and political instability, poor or inadequate infrastructure, corruption and secrecy, weak government and lack of policy transparency, and high dependence on raw materials:

**Macroeconomic Instability:** African countries are classified as developing economies. The instability in key macroeconomic indicators such as exchange rates, inflation rates, fiscal deficits, and interest rates creates an unpredictable business environment that deters foreign investors and hampers international trade. Most African economies have not been able to build strong fundamentals to support their growth and development. Investors and trades are afraid of losing the value of their capital in Africa. Investors and traders seek stable and predictable economic conditions to make long-term investment and trade decisions. Africa has not shown that it can manage its economy well to warrant an increasing flow of FDI and trade in the region.

**Political Instability:** One reason why investors are reluctant to invest or trade in Africa is the level of uncertainty in Africa. Political unrest, conflicts, and unstable governance in some African countries deter foreign investors and disrupt trade activities, impacting economic growth. The frequent military interventions in politics (recent Coup Detat in Mali, Burkina Faso, Guinea,

Gabon, and Niger) and religious and ethnic conflicts in Nigeria, Sudan, etc. are critical issues exacerbating the poor FDI and trade in the region.

**Poor or Inadequate Infrastructure:** The lack of essential supporting infrastructure such as telecommunications, transportation, power supply, and skilled labor serves as a deterrent to foreign investment and trade due to heightened transaction costs. Asiedu and Morrisset show that there is a significant positive relationship between strong infrastructure and FDI flows and trade in Africa.

**Corruption and Bureaucracy:** Africa has garnered a reputation as a warehouse of corruption, which has become a significant concern in recent years. Rampant corruption and excessive bureaucratic hurdles within African nations pose substantial obstacles to fostering healthy FDI inflows and trade in the region. The high costs of conducting business, attributed to unnecessary bureaucracies and briberies in many African countries, cultivate an unfavorable environment for both trade and FDI. Furthermore, the presence of unfavorable policies and corruption perpetrated by politicians and government officials diminishes the attractiveness of investing or engaging in trade within Africa. These factors collectively contribute to a challenging environment that hampers the growth of FDI and trade in the region.

**Weak Government and Lack of Policy Transparency:** Fragile law enforcement resulting from corruption and a lack of reliable mechanisms for safeguarding property rights serve as potential obstacles to FDI in the region. The lack of transparency in the economic policies of governments in Africa is alarming. In several African countries, it is often difficult to tell what specific aspects of government policies are. Investors do not have trust in such an environment to invest or trade. The lack of a credible mechanism for the protection of property rights is a possible deterrent to FDI in the region. Foreign investors prefer to make investments in countries with very good legal and judicial systems to guarantee the security of their investments. Furthermore, unfavorable policies prevalent in certain African nations, such as imposing high taxes on foreign investors, imports, and exports, create disincentives and dampen FDI flows and trade within the region.

**High Dependence on Raw Materials:** Several African countries rely on the export of a few primary commodities for foreign exchange earnings. This has been a lasting challenge among most African countries since they do not have the infrastructure or technical know-how to process their raw commodities into finished goods. Because the prices of these commodities are highly volatile, they are highly vulnerable to terms of trade shocks, which results in high country risk thereby discouraging foreign investment.

**Border Barriers:** The cross-border trade in Africa is not encouraging due to the difficulties in crossing the borders of African countries. This is reflected in the poor intra-trade records in Africa. Reports of the hardships encountered by traders while moving goods from one African country to another are a frequent occurrence. Regrettably, immigration officials have not been supportive in addressing these concerns. Cumbersome customs procedures and delays at border checkpoints contribute to significant time and cost burdens for traders.

Despite the introduction of initiatives aimed at facilitating cross-border trade, such as the Africa Continental Free Trade Area (AfCFTA), there remains a noticeable absence of effective advocacy to stimulate trade activities both within and across African borders.

## 18.7 Extant Literature on the Relationship Between FDI and Trade

### *18.7.1 Theoretical Stance*

The Richardo and Heckscher-Ohlin classical trade theories assumed immobile international production factors from which no conclusions about the FDI-trade nexus could be reached (Abor et al., 2008). Mundell relaxed the assumption of international production factors being immobile and proposed capital mobility as a substitute for trade. Markusen (1983), though presented models that indicate alternative bases for trade other than relative factor endowments. Alternative conditions for trade include returns to scale, deficient competition, factor and production taxes, and technology differences. Markusen (1983) concluded that the substitutability of capital and trade is a special case and general characteristic of factor proportions models. In response to the shortcomings of Heckscher-Ohlin models to explain international trade patterns, the product life-cycle theory of Vernon suggests a substitutional relationship between FDI and trade. The theory predicts that as a product matures, there is a shift in production from the home country of its innovation to production in foreign countries replacing exports. The eclectic or ownership, location, and internalization (OLI) paradigm developed by Dunning (1973, 1980) also provides a framework to investigate contextual-specific theories of FDI and international production. Dunning (2001) reiterated the propositions of the eclectic paradigm where production financed by FDI conducted by multinational corporations (MNCs) will be determined by how three sets of forces are organized: ownership income-generating assets, internalized markets to generate and/or use the said assets, and *location advantage*. Dunning (2001) stated that when formulating operational hypotheses concerning the link between individual OLI variables and international production levels and patterns, it is necessary to specify the relevant context for which the link is being examined. For instance, variables clarifying resource-orientated FDI likely differ from those explaining import-substitution FDI.

### *18.7.2 Empirical Literature*

It is also important to understand that FDI and trade go hand in hand, both involve cross-border transactions and economic integration. It is reasonable to expect linkages between FDI and trade. The relationship is however not that simple. The nature of the relationship depends on the country, industry, and

the period concerned. Moreover, the relationship between FDI and trade is not always monotonic as explained by the theories. FDI and trade relationship is more complex than being monotonic. With different motivations, FDI may have different effects on trade. The complementarity or substitutability of FDI and trade may result in a positive or negative relationship between them. However, this remains an empirical question.

Empirical studies in Africa have also shown that FDI and trade are complements. FDIs may focus on the production of goods or services that are complementary to other import products and increase the import of the complementary product/service. According to Head and Ries, manufacturing downstream products in a foreign country may induce production leading to a positive relationship with the trade. Resource-seeking FDI is driven by the pursuit of raw materials to produce scarce or insufficient goods in the investor's home country. Typically, this form of FDI leads to an uptick in exports from the host nation to the investor's home country, as well as to other third countries. Foreign corporations take advantage of the low cost of materials and production in the host country. This will actually improve the trade balance of the host country. Hailu shows that FDI has a significant positive effect on exports and imports in African countries between the periods 1980 and 2007. His study showed that the elasticity of export to FDI is higher than that of import. He explains that exports expand because rather than engaging in import-substitution activities, MNCs are involved in production championed by FDI. Akoto demonstrated that a 10% increase in FDI inflow resulted in a potential 1.87% increase in export volumes in South Africa. Amighini and Sanfilippo (2014) show that FDI flows do matter for export expansion in Africa. Their study shows that both imports and inflows of FDI positively affect the ability of Africa to expand its export baskets. Matthias et al. (2016) show that China's FDI flows in Africa are associated with an increase in export in Africa. Anetor et al. (2020) show that FDI is positively associated with trade in Africa. They show that both FDI improves trade and together have a significant effect on economic growth in Africa. Egyir et al. (2020) show that inflows of FDI and remittances in Africa complement the positive effect of trade on economic growth in Africa.

In other cases, FDI may reduce trade as foreign firms may serve the local market without engaging in export activities. This suggests they are substitutes. On the flip, an increase in trade may attract more FDI as firms seek to access new markets. In other cases, high trade volumes may deter FDI as firms face strong local competition. Therefore, the relationship between FDI and trade may be positive, negative, or neutral depending on the specific context and characteristics of the countries involved. Cantah et al. showed that trade openness positively affects FDI in the Sub-Saharan region. They aver that for the region to attract more FDI, they must open up their trading activities and a more open economy in terms of policy. They found that the trade openness effects on FDI flows are significantly higher in the West African countries than in the other parts of Africa. This implies that the level of international trade

activities in the region has implications for its FDI flows. K. H. Zhang (2022) shows a positive effect of trade openness on Chinese investment in Africa. The study explains that improvement in imports and exports in Africa serves as a motivation for increased FDI flows from China to Africa.

There is also an intertemporal feedback effect between international trade flows and FDI. Intertemporal feedback effects or bidirectional relationship means that an increase in FDI can lead to an increase in trade, and an increase in trade can lead to an increase in FDI (Berahab, 2017). This is often seen as complementary, with FDI creating opportunities for trade and trade creating opportunities for FDI. Ahmed et al. (2011) show a bi-causal relationship. Their study shows that FDI and exports show a feedback effect in Sub-Saharan Africa. Gossel and Biekpe (2014) show a bidirectional relationship between FDI and trade. They allude that FDI and trade are integrated into the country's trade-led growth dynamics. They show a positive feedback effect of FDI and trade in Africa.

## 18.8 Conclusion

The chapter offered an insightful overview of the FDI and trade landscape in Africa, showcasing the continent's role in the global economic arena. It does so by providing detailed facts and figures complemented by scenery charts and tables to help readers navigate and understand the information discussed. It discussed the drivers behind the remarkable growth of FDI and trade in Africa and presented stylized facts specific to the region. It provides various theories that underpin FDI flows and trade dynamics, shedding light on the multifaceted factors influencing these economic activities. The chapter also explains the effects that FDIs and trade have on Africa's economic growth and development, social, and environmental development. This chapter provided a comprehensive understanding of the intricate relationships between FDI and international trade in Africa. It underscored the pivotal roles played by governments in fostering favorable environments for FDI inflows and trade expansion. The empirical evidence provided reinforces the FDI-trade discussion in Africa, offering valuable insights into real-world dynamics. Overall, this chapter provides compendious insight that serves as a foundational resource for comprehending the dynamics of FDI and international trade in Africa

*Discussion Questions*

1. Explain Foreign Direct Investment and its types with real-world examples.
2. What is International trade? Explain the kinds of trade.
3. Discuss the theories underpinning FDI and trade.
4. What is the nature of the relationship between FDI and trade in Africa? What evidence does the empirical literature provide in support of the nature of this relationship?

5. Discuss the stylized facts on FDI and trade in Africa
   Hint: Which regions are more important, who are the major export and import partners, what is the nature of intra-Africa trade, what has been the growth trend in FDI and trade, etc.?
6. What factors drive FDI and trade in Africa
7. Discuss the benefits and challenges facing FDI and trade in Africa.
8. Discuss the role of the government in promoting FDI and trade in Africa.

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CHAPTER 19

# Remittances and International Trade in Africa

*Gloria Clarissa O. Dzeha, Joshua Yindenaba Abor, and Robert Lensink*

## 19.1 Introduction

The last couple of decades are characterized as an era of swift globalisation with recent migration of humans which seem to have reached remarkable levels that appears to be a defining feature of current times. The quest to seek for greener pastures has led to several cross-border migrations, thus affecting the flow of migrants' remittances to migrants' home countries. The pursuit for cross-border movements will continue to increase as the World Bank directs its effort at partnering with emerging economies and district institutions by way of encouragement towards access to unrestricted free trade (World Bank, June 2022). This drive is likely to enhance the optimization of mutual access to natural resources, giving room to economies of scale to empower countries to achieve their goals towards transformation (Bilsborrow & DeLargy, 1990).

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_19

The idea of regional integration has led to key significant developments in recent times which include the surge in international trade and investment as well as the increase in the free movement of labour across borders. This has had an imperious impact on trade and remittance flow beyond Africa.

For instance, part of Africa's Agenda 2063 is an approach towards integration, which seeks to enhance Africa's trade and the free movement of labour and capital to ensure its growth and development (World Bank, June 2022 edition). This has spurred trade and migration beyond Africa as a result, preventing all the seclusions that impede the flow of tradable goods and services and again ease the potential of people to move in search for greener pastures to enhance their well-being. International trade and migration therefore continue to intensify beyond the fundamental idea of regional integration in Africa. Movement of persons for the purpose of short-term migration has stimulated growth in investment and global trade which include other cross-cutting issues that seem to becoming of increasing relevance according to the Migration Policy Framework for Africa and Plan of Action (2018–2030). Fortunately, these have escalated beyond the continent (Woodruff & Zenteno, 2001).

It is predicted that international trade will unlock new paths to the growth of a country's businesses and increase revenue with payoffs in foreign currency (IMF Briefs, November 2021). Foreign currency payments as a result of trade lead to benefiting from currency fluctuations as well as currency conversion issues. Similarly, migration comes with remittance inflows and the accumulation of foreign exchange within receiving economies. Remittances and trade seemingly across the globe encourage the flow of eurocurrencies; therefore, they have the potential of influencing macroeconomic variables, such as inflation, interest rate, and unemployment within a domestic economy (Jijin et al., 2022). Policy discussions and academic literature on remittances and trade have been dealt with in isolation. There are many papers on trade in Africa (Moudatsou & Garcia, 2022; Oloyede et al., 2021; Bensassi et al., 2019) and several papers of Sub-Saharan African migration and remittance flow (Anarfo et al., 2020; Sutradhar, 2020; Dzeha et al., 2018). Yet, the two have not been exhaustively studied together. There is no study that combines these two. This chapter takes up the challenge of ascertaining the link between migration/remittances and foreign trade. Trade and migration flow in tandem. While the causality between trade and migration flow is unclear, it seems important to consider the combined effect of trade and remittance flows on the economy. In discussing this nexus, it is important to understand the theories that explain the flow of remittances and trade. It is also important to review some stylized facts associated to both. Finally, we examine how migration resulting in remittance flows and international trade relates to impact growth and development in Africa in view of the resultant flow of foreign currency from both.

The rest of the chapter is structured as follows: Sect. 19.2 discusses theories and stylized facts regarding remittances and international trade; Sect. 19.3 discusses international trade and Africa's trade direction; Sect. 19.4 examines the

international remittances and international trade nexus; Sect. 19.5 identifies the barriers to remittances and international trade in Africa; and finally Sect. 19.6 concludes the chapter.

## 19.2 Theories and Stylized Facts

In this section, we discuss the theories of remittances and also provide stylized facts on remittances in Africa.

### *19.2.1 Theories of Remittances: Why Do Migrants Remit?*

Remittances are transfers in the form of either cash or goods sent home by migrants living and working abroad to support their family and other relations in their home country. Fromell et al., 2020, argue that migrants' motivation to transfer remittances differs from motives regarding other cross-border capital flows. The paper also encourages further examination of the developmental effect of remittances and their continuous flow. The motives of migrants to remit vary, and these include pure altruism, pure self-interest, and insurance.

*Pure Altruism*

Pure altruism is based on the selfless motive of the migrant to remit to migrant's family back home. Undergirding this motive is the fact that increases in remittance inflows always move in tandem with the decrease in migrant's family's income back home. Thus pure altruism is fundamentally driven by pure love and concern for the well-being as well as the improvement of the living standard of recipients (Lucas & Stark, 1985; Becker, 1974).

*Pure Self-Interest*

Lucas and Stark (1985) distinguish three reasons for a pure self-interest motive. First, the intent of the migrant to return to his native home, having accumulated assets to his benefit by way of inheritance. Thus migrants may have an incentive to remit as they hope to be compensated later in the form of inheritances. Therefore, the remittances sent are positively related to the family income and wealth back home as these form the base for the migrant's inheritances later on in life (Straubhaar & Vâdean, 2006). Second, the intent to earn respect and nurture good associations among family members and close companions, healthy networking, building social capital so as to relish some political or leadership power with people on return to their home country. Third, the drive to migrant's remitting intensifies for the reason that the migrants mostly need someone to care for his assets and property back home to the extent that asset and resources will be reassigned to the migrants on their arrival to their home country (de la Briere et al., 2002).

*Insurance*

The insurance motive of remittances refers to the hidden contractual agreement which may include co-insurance, loan reimbursement, with some inherent considerations such as 'give-and-take' of services in a premeditated manner, that will enable the migrant as well as the migrant's relations to derive mutual benefits as compensation from migration (Depoo, 2013; Lucas & Stark, 1985). The insurance motive of the migrant also stems from the desire for protection against fear of uncertainties that characterizes the life of a migrant in the source country. These uncertainties include the loss of job, ill-health, and abrupt return of migrant from the destination country. With these motives associated with transnational migration and cross-border movement of people, remittances will continue to escalate and it becomes imperative that migrants will send money back home.

### *19.2.2 Remittances in Africa: Stylized Facts*

Africa's development hinges mainly on voluntary as well as forced migratory movements as per the World Bank report 2020. The Migration Policy Agenda for 2018–2030 expresses that owing to the diversity of factors comprising poor socio-economic conditions, political instability, conflict, and civil strife, there is a surge in the quest to migrate on the continent of Africa. The complexity of migration patterns which seem to be self-motivated continues to evolve and has contributed to Africa's present demographic landscape. Certainly Africa's cross-border migration continues to remain significant to livelihood as well as a coping strategy in times of ecological and economic downturn, lack of employment and decent work, and humanitarian disasters as remittances' inflow soothes the effects of these. Africa's policy agenda therefore outlines strategies to support migration among member states of the African Union. The strategy includes thoughts regarding regional and continental integration framework. These considerations are intended to improve the free labour movement among member countries and beyond, which facilitate massive flow of remittances.

Migration in Africa continued to grow in the last two decades. Since 2010, the number of African migrants has exceeded 40 million according to the African Migration Trends Watch—2023 by the Africa Center for Strategic Studies, the January 9, 2023, edition. It is even likely that the number of migrants will grow much more in view of all the push factors which include lack of employment, low living standards, and lack of food and shelter, which serves as a motivation to migrate in search for greener pastures (Carbajal & Calvo, 2021; Khalid & Urbański, 2021). The increase in migrants goes together with a steady increase in remittance inflows. Figure 19.1 compares the remittance inflows to Sub-Saharan Africa since 2000 with Official Development Assistance (ODA) and foreign direct investments (FDI).

The total flow of remittances since 2000 continues to grow and is now the second largest stable source of external financial flows, after ODA.

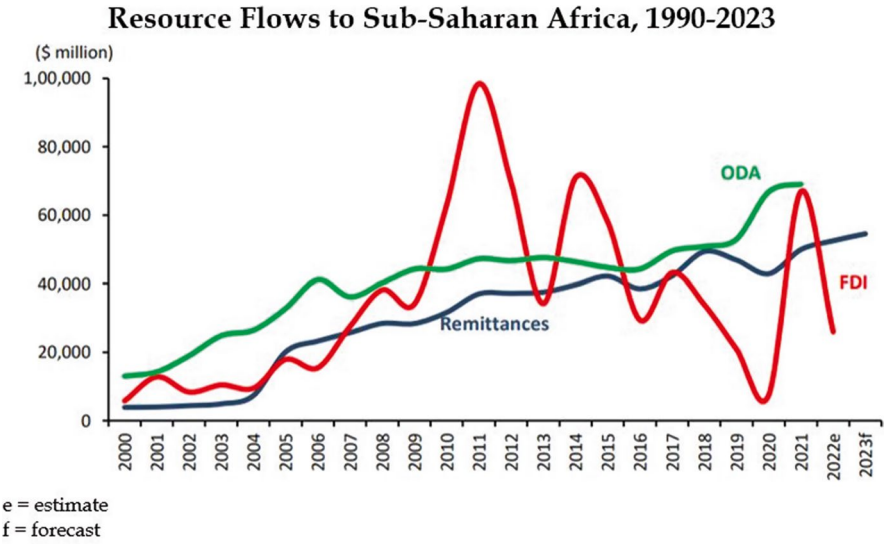


**Fig. 19.1** Remittance inflows. (Source: World Bank's Migration and Development Report, 2023)

In comparison to other resource flows, remittance inflows have remained relatively stable in recent years, which makes remittance inflows more predictable, with possibly positive effect in the form of poverty reduction.

However, it is worth noting that, it is difficult to precisely estimate the total inflow of remittances into Africa as some remittance inflows are sent through unofficial channels, thus its recordings elude the appropriate authorities. Unrecorded inflows as a result of the use of unofficial channels are assumed to be at least 50% more than recorded flows (Dilpha, 2018).

Prior to the COVID-19 pandemic, remittances officially received and recorded reached $714 billion in 2019, which included $553 billion received by low- and middle-income economies, according to the estimations of the World Bank 2020. Notwithstanding some decline in the amount of remittances in response to the pandemic, in 2020 the magnitude of remittance flow remained resilient. This accentuates the arguments for the significance of remittances in providing such key lifeline supports.

### *19.2.3 The Impact of Remittances on Welfare and Economic Growth: Empirical Evidence*

The significance of remittances worldwide has given room for a compendium of studies on the impact of remittances on recipient countries welfare/economic growth. There is ample evidence that remittances can support economic growth by providing recipients alternative financial means which may lower liquidity constraints of household's businesses (Bahadir et al., 2018; Giuliano

& Ruiz-Arranz, 2009). There are also studies that suggest that remittances enable total factor productivity growth to further enhance human development in Africa (Dzeha et al., 2018). In several instances, remittances are observed to reduce poverty by increasing disposable incomes of recipient-households and expanding household expenditure on essential items such as food, health, and education during periods of economic downturns and hardship in the migrants' home countries (Acosta et al., 2008; Adams & Page, 2005). Remittance flow as a result of migration is key to global trade and economic integration. It, therefore, supports trade in goods and services and industrialization, thereby contributing to socio-economic development and poverty reduction (OECD, 2009). Furthermore, the inflow of remittances may help to develop recipient countries' financial markets (Chowdhury, 2011), which may boost the efficiency of the banking systems leading to a better credit environment for domestic companies (Cooray, 2012). However, there is also some evidence on possible negative impacts of remittances on recipient economies.

Remittance flow is concomitant with migration, which increases brain drain. Clearly, remittance inflows have the potential of increasing the social inequality level in poor countries, as households that receive remittances are likely to consume higher incomes than those who do not (Acosta et al., 2008). Consequently, such increase in inequality levels increases corruption in non-OECD countries (Berdiev et al., 2013), as well as increase in inflation (Narayan et al., 2011; Le Thanh Tung et al., 2017). It may also be the case that the inflow of remittances leads to an increase in inflation, which may have a negative effect on private investment. Remittance inflows worsen and increase dependency syndrome, and lead to moral hazards. It gives the impetus to withdraw from participating in productive and business activities in remittance-recipients' countries (Mallick, 2012). These, consequently, reduce labour participation in the economy of recipients and therefore lessening the productivity of remittance—receiving employees as the economic incentive to work is diminished. This has a net destructive impact on economic growth (Le, 2009).

## 19.3 International Trade and Africa's Trade Direction

Human civilization has evolved with trade. International trade is critical to a nation's development and industrialization; however, Africa's industrialization and structural transformation is hindered by the low volume of trade recorded, which takes place both within and outside of Africa. Together with migration, the free mobility of people is one of the aspects that potentially spur an increase in trade within Africa and beyond (Trade Migration Policy Framework for Africa and Plan of Action, 2018–2030). Clientele countries of the World Bank Group are able to improve their access to industrialized countries' markets to enhance their participation in the world economy through trade and migratory movements (World Bank, 2020).

International trade is not lopsided; it involves simultaneous imports and exports among countries. Imports measure the value of goods and services that enter a particular domestic region or country irrespective of their final destination and similarly exports of goods and services are measured by the value of goods which leave a particular domestic region or country, regardless of whether the goods have been processed in the domestic region or country (OECD, 2020). Imports and exports of services reflect the value of services provided to residents of other countries or received by residents of the domestic territory.

Different models explaining the gains as well as the detrimental effect of international trade have been provided in the literature (Young, 1991). These give the indication that, irrespective of the benefits of international trade, its drawbacks on several African economies cannot be overemphasized. For instance, excessive importation into a country beyond its exports brings about trade deficit thus allow countries to consume a variety of goods beyond what they produce. This causes a boost in economic activity and better living standards. There is no direct relationship between the condition of a country's trade balance and its economy, in that trade deficits are not necessarily bad and are not a measure of whether trade policies or agreements are fair or unfair. For instance, the United States, which happens to be one of the world's super powerful economies, has run a trade deficit since the 1970s according to the Global Future Council on Trade (GFCT). Trade deficits are associated with excessive importation which is perceived to destroy jobs of local or domestic manufacturers. Although this claim is unsubstantiated by economic experts, as it is argued that the United States, for example, has quite a substantial trade deficit with China, and all efforts to lessen this deficit have mostly botched and US manufacturing jobs continue to decrease.

Again it can be observed that trade generates both fiscal benefits and costs, but in the long run, the resultant effect is positive on the whole economy.

This notwithstanding, trade agreements may spur exports to enhance economic growth in emerging economies, meanwhile the competition accompanying those agreements is often detrimental to small local industries. Evidence with respect to trade indicates that there exists a threshold below which larger trade openness becomes beneficial in its effect on the growth economy. However, beyond that threshold of openness trade causes a decline in growth (Zahonogo, 2016). For instance, the role of trade to the growth of an economy differs from others, in that it is contingent on whether the potency of an economy's comparative advantage points the economy's resources towards productive activities that spawn long-run growth or otherwise. Above all, there are concepts that suggest that, due to technological or financial constraints, less-developed countries do not have the social competence needed to adopt technologies developed in more advanced economies. Consequently, the effect of trade on growth may vary in accordance to the level of the development of an economy. Despite its potential positive effect on growth, some theoretical studies claim that trade openness may hamper growth (Redding, 1999; Young, 1991).

Trade assists domestic companies to gain competitive urge on the global market and provides them with experience in foreign markets. However, this eventually precipitates into outsourcing of production processes as well as jobs. These phenomena exist, as governments reduce tariffs and processes on imports, shrinking domestic industries and job opportunities, such that they are not in the position to compete worldwide and thus job outsourcing becomes a necessary option.

Although trade may reduce poverty and increase economic opportunity in some economies, still, it is argued that international trade can truly be depraving for smaller nations, pushing such nations to a greater detriment on the global stage. (Trade Policy and Economic agreements—Wilson centre).

Import and export activities expand markets and grant access to goods and services that otherwise may not be available domestically in countries, yet trade potentially influence GDP, exchange rate, level of a country's inflation, as well as interest rates (Giovanni & Shambaugh, 2008; OECD, 2016). Thus, countries with weak productive capacities are faced with rising level of imports, which lead to upward trade deficit that consequently result in negative exchange rate crises. Contrarily, if domestic trade balances are good, it may culminate into long-run effect of increased productivity and exports. This ultimately results in more competitive pricing and brings a cheaper product home to the consumer. Again for some African economies, like Ghana, weaker domestic currency stimulates exports from other countries whiles importation of goods and services inward becomes extremely expensive as compared to countries with stronger local currency which hinders exports but encourages imports as they are inexpensive. In the same light, countries with higher inflation can also influence exports through a direct effect on input costs—materials and labour.

Exploring trade on the global front, volatility patterns however have persisted over the last decade, and this is worsened by the global impact of the COVID-19 pandemic, of which, international trade is not exempted, affecting the trends of trade in 2020. The fiscal disturbances resulting from the pandemic caused a weakening in the global trade in goods and services of about 10%. Trade in services waned significantly in excess of trade in goods. The 2021 recorded data shows that trade stalwartly pick up for the period of 2021. The value of manufactured goods traded substantially exceeded the value of that of 2019. Trade in services continued to dwindle less than that of the 2019 value and extended into 2021. Furthermore, global trade significantly continues to suffer as a result of the intensity of recent economic downturn which continues rapidly.

The World Trade Organization's (WTO) predictions for 2023 show a depressing view that may affect the balance of trade between countries in the presence of this difficult economic climate. Remittances have the potential of lowering the long-run growth of developing countries with a less diversified tradable sector (Rodrik, 2008). The growth of trade is predicted to decrease from 3.4% to barely 1.0% for next year. This is seen as resulting from rising

inflation, increasing energy prices, and the uncertainties triggered by Russia's invasion of Ukraine. All these put pressure on global trade (WTO Report, 2023).

It is obvious from Fig. 19.2 that the unpredictability in the volume of global trade exceeds the volatility of global output. Generally indicative of global trends, the overall percentage of global trade over world output plummeted. Thus in 2019 the volume of 28% dropped to approximately 25% in 2020, reaching almost 30% in the year 2021 (United Nations Conference on Trade and Development (UNCTAD) 2022). International trade in goods and services was approximately US$25 trillion; however, in 2020 trade value contracted in goods and services recorded was US$2.5 trillion representing just about 10% of the previous year. In 2021 however the trend picked up as levels of international trade in goods and services shot up by US$ 6 trillion getting to high record of approximately US$28 trillion. Looking beyond those averages, quarterly data indicate even more volatility, as most of the trade downturn occurred during the first half of 2020. The COVID-19 pandemic immediately reflected in global trade disruptions, reducing trade by about 7% in Q1 2020. A more severe drop occurred in Q2 2020, as the pandemic spread around the world. During Q2 2020, world merchandise trade dropped by about 18%. Global trade, however, has bounced back after the pandemic—it was 10% higher than pre-pandemic levels in May 2022.

Although Africa seems to have an optimistic business outlook, the 2023 is predicted to be challenging for African exporters (Africa, 2023). This stems from the concerns with the risk associated with key export procedures that expose the fortunes of the countries under the European Union, the United States, as well as some Asian countries such as China. It looks apparent that

**Fig. 19.2** Global trade trends. (Source: UNCTAD secretariat calculations based on national statistics)

various business concerns will invariably experience lower demand in the future from these markets. It is presumed that the European Union as well as the United Kingdom is likely to be weighed down into recessionary period in 2023. It remains apparent that the growth of the United States' economy will plummet sharply by way of high inflation as well as monetary policy constrictions which becomes overstretching for households' expenditure, savings, and commercial investment. It is obvious that, China's economic performance will be cowed by some domestic stresses, including the protracted effects of the COVID-19 pandemic as well as real setbacks that impede the real estate sector. Figure 19.3 shows the global direction of trade for African countries.

Notwithstanding the aforesaid, there are some reasons to believe that African exporters will not experience a drop in performance in 2023. These reasons include the fact that commodity prices in energy products, metals, and minerals are likely to somewhat remain unpredictable. However expectations are that the volatility will fade away gradually by 2023, according to the October 2022 edition of the 'Economist Intelligence Unit'. Exporters of such key commodities are likely to continue to profit in the short term from the positions of trade increase accruing to their international balances. Furthermore, the intensity of global competition will continue to heighten in order to confidently protect access to Africa's energy products as well as industrial inputs in the long term. These postures are deliberately significant in that with current worldwide sanctions on Russian businesses and organizations, investors as well as international buyers have turned their attention into different places, and this is likely to ignite support to increased demand for the exports of African commodities in 2023.

Additionally, mining hubs in Africa including Botswana, the Democratic Republic of Congo (DRC), Namibia, Nigeria, Sierra Leone, South Africa,

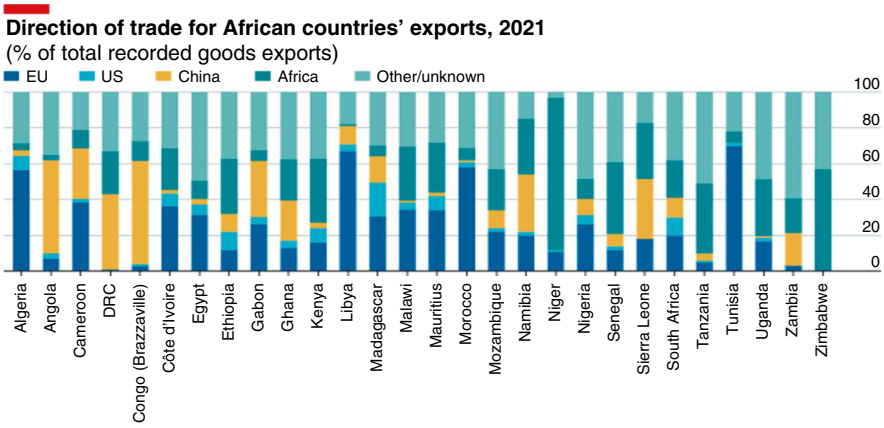


**Fig. 19.3** Global direction of trade for African countries. (Source: EIU)

Tanzania, Zambia, and Zimbabwe are likely to be increasingly patronized by mining companies as well as commodity traders in the Western world. This is an attempt to eschewing themselves (mining companies and commodity traders) from suppliers of copper, cobalt, diamonds, gold, iron ore, manganese, nickel, platinum, palladium, tungsten, uranium, vanadium, and zinc who are Russian-based policy according to the March 2022 edition of the 'Economist Intelligence Unit' focus on Africa.

It is however important to note that African manufacturing countries with an export-driven orientation are likely to face extreme difficulties in 2023 which is characterized as uncertain epochs, in that there exist higher export costs which are likely to cause a decrease in demand. Nevertheless, this is only likely to be mitigated by initial efforts at ensuring regional integration for strong partnership and global competiveness. Whiles, Africa ensure increased exports to enhance its trade balances, international trade involves, both export as well as imports of goods and services.

## 19.4 Descriptive Relationship Between Trade and Remittances

Remittances like other international capital flows have implications for international trade among related countries. The trade of a country's manufactured goods or services and the inflow of remittances, both have foreign currency implications. Invariably substantial flows of foreign exchange into an economy clearly affect the equilibrium level of the gross national product and other macroeconomic variables. The pure Keynesian model is the oldest model that tries to capture the short-run macroeconomic impact of international transfers. Under the assumptions of sticky prices, fixed exchange and interest rates, and in the absence of supply constraints, this model shows that any shock on the demand side has a disproportionate effect on the national output (Basu & Rajan, 2018).

Beyond what the idea holds in the remittance-trade literature, it will be intuitive to ascertain the actual figures with respect to the flow of remittances and trade in Africa from 2004 to 2022 from the World Development Indicators. This compliments the existing knowledge from the literature. Thus Table 19.1 provides trade and remittance statistics as per the WDI, 2022, data on 54 African countries.

From Table 19.1, we find the correlation between remittances and trade. The figures in the parenthesis are the *P*-values, which also show the level of significances of the correlations. The correlation between remittance and trade is very low (0.023) however positive, suggesting that, while remittances increase, trade also increases although not with the same magnitude. Thus, they exhibit a tandem movement although the strength of the relationship is weak and the *P*-value of 0.623 shows this is not key. The correlations between remittance and exports are somewhat low but are positive, suggesting that exports increase as remittances increase although the strength of increase is not

**Table 19.1** Pairwise correlations between trade and remittance 2004–2022

| *Variables* | *(1)* | *(2)* | *(3)* | *(4)* |
|---|---|---|---|---|
| (1) Trade Openness/GDP | 1.000 | | | |
| (2) Remittance Inflows/GDP | 0.023 | 1.000 | | |
| | (0.623) | | | |
| (3) Volume of Exports/GDP | 0.030 | 0.037 | 1.000 | |
| | (0.449) | (0.445) | | |
| (4) Volume of Imports/GDP | 0.051 | -0.006 | 0.287 | 1.000 |
| | (0.198) | (0.903) | (0.000) | |

Source: Data source is world Development Indicators

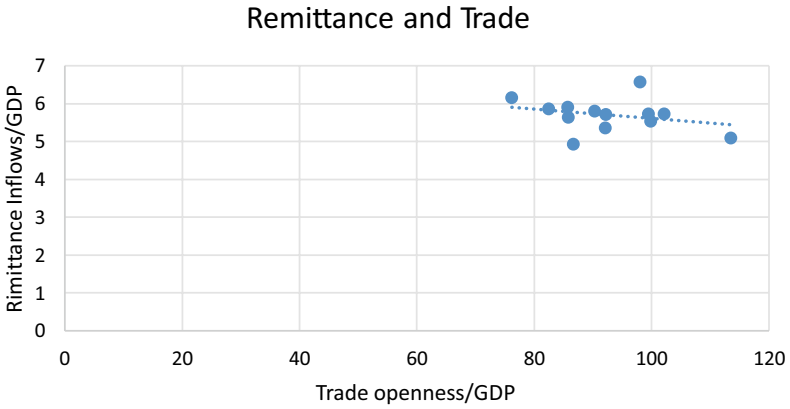


**Fig. 19.4** A scatter plot of remittances and trade in Africa, 2004–2022. (Source: Data source is world Development Indicators)

the same and weak. This however gives an indication that remittance inflows could be harnessed to ignite investments in the production of tradable goods for export in a minor way. On the other hand, remittances have a negative correlation with imports, in that as remittances increase imports decrease. This is extremely low, suggesting weak correlation between remittance inflows and imports. These justify the lack of consistency in the remittance-trade literature. While some studies show a positive relationship between remittances and trade, others indicate a negative relationship. In certain instances there is no relationship at all. These results may be attributed to several reasons including the context of study and how remittances affect imports and exports within different economies (Djajić, 1998; Ratha, 2005).

From Fig. 19.4, we show a scatter plot to indicate the possible strength of the relationship between changes in remittance flow and trade in Africa from 2004 to 2022. It can be seen that remittances reduce by a smaller margin when countries open their economies for international trade.

## 19.5 The International Remittances and International Trade Nexus

It is substantially acknowledged that trade and investments are established rapidly among countries from which migrants flow in and out and thus accounting for the growth of remittance flow (Ethier, 1995; Dolman, 2008; Ndiaye et al., 2011; Ratha et al., 2011; Egger et al., 2012; ICMPD & IOM, 2015; Foresti & Hagen-Zanker, 2018; UNCTAD). However, surprisingly there is not much study that directly research into international trade and remittances.

There is no consensus in the extant remittance and trade empirical literature. Whiles there seems to be almost no correlation between the two, some findings from studies suggest that remittances have a positive impact on trade openness (Regmi, 2022; Mallick, 2012), and others indicate the existence of negative relationship between remittance and trade balances (Regmi, 2022; Dahal, 2014; Bourdet & Falck, 2006). Bhatta (2013) however shows that, the effect of remittances and trade occur in the long run at a certain threshold. For instances, in a country like India in the 1990s, the trade liberalization caused an increase in trade openness, which led the country into some onset of temporary foreign exchange difficulties. It was found however that, an increase in remittances was needed to tidy up the country's foreign currency crisis. This indicates that remittances have the potential of obviating the negative encumbrances associated with trade in remittances-receiving economies. Thus it is expedient to set trade policy reforms or economic openness and adopt mechanisms that enhance the flow of remittances (Fromell et al., 2020).

It is observed that, the steady growth of some economies, result from the inflow of remittances which although household receipts, increases the formation of domestic capital. Cumulatively such domestic capital leads to the amassing of capital goods, including equipment and tools for personal businesses, access to assets like transportation, and community electrification projects. Remittance inflows add to available money, swirling around a country's economy—to the build-up of capital goods for investment enhancement, technological advancement which invariably incentivizes the production of increased and improved goods and services, and further stimulates demand and increases trade with other countries (Bevan et al., 2004; Aggarwal et al., 2011; Sibindi & Bimha, 2014).

Arguably remittances impact international trade and trade balances in developing countries over the last three decades as shown by Le (2009). This is found to be due to the association between remittances and imports, and not exports (Le, 2009). Remittances fuel the capacity to import through the increased inflows of foreign exchange through remittances thus giving the impetus to import and enhancing trade in the exporting country. Simultaneously, remittances can stifle the country's exports if they lead to an appreciation of the external value of the domestic currency. Meanwhile (in Farzanegan & Hassan, 2020), there is the indication that economies with weaker degree of investment, remittances foster higher trade deficit. While this effect is found to be

robust in Middle East and North Africa countries, there is no proof that, remittances effect trade balance in Asia-Pacific countries, which receive the largest inflows of remittance globally (Jadhav, 2003).

Remittances inspire the importation of extravagant goods and the consumption of luxurious merchandise among recipient-households. This spurs and aggravates the burden of import bills on countries and nullifies the benefits of remittances on the welfare of households (El Sakka & McNabb, 1999). For instance, if remittance-recipients spend large portions of the inflows on leisure or non-traded goods, this, in turn, would shift the investment and productive resources from the tradable to non-tradable sectors, thereby resulting in a decline in the production of manufactured goods. This is ignited in the spending pattern of remittance-receipts and can influence further appreciation of the local currency.

Remittance flow into a country results in the flow of foreign currency into that economy. Beyond certain thresholds, an increase in the flow of foreign currency into an economy precipitates a rise in the value of the domestic currency of that country (Bourdet & Falck, 2006) which consequently spark an increase in the exchange rate. This phenomenon invariably reduces the price competitiveness in the export of goods and services produced locally. Domestic goods for exports to other countries become more expensive due the appreciation in the value of the local currency. On the other hand, the value appreciation of the local currency encourages importation as imported goods become cheaper. This occurrence is what is describes as the 'Dutch disease'. Dutch disease is the increase in appetite for the importation of foreign products to the detriment of local manufacturing concerns as exports become expensive, thus, decreasing the competitiveness of the country's export goods. Acosta et al. (2009) give credence to this and show that indeed remittance inflows into Latin American countries are associated with the Dutch disease occurrence in those countries. In their argument they show that the transfer of large and sustained extrinsic resource, such as remittances, has the potential of causing a rise of the local currency and consequently create a deficit in the international competitiveness of a country's trade. Nonetheless, Chowdhury and Rabbi (2014) indicated that the progressive socio-economic effects of remittances in Bangladesh show that remittances have opposing adverse effects on trade competitiveness on the country's export goods, which is however not systematic (Rajan & Subramanian, 2005).

These notwithstanding, most importantly, it is worth noting that, the appreciation of the value of the domestic currency supports the importation and consumption of foreign products (imported goods and services) thus invariably stifling out the local industries in developing countries as demand turns to favour imported goods, discouraging industrialization (Amuedo-Dorantes & Pozo, 2004). This invariably culminates to domestic trade deficits. Although trade deficits are inherently neither good nor bad, they are, however, complicated by a variety of economic factors including the country's economic health.

Although it seems palpable that remittances and trade are two separate occurrences, empirical evidence suggests that the rippling effect of the flow of remittances tends to impact international trade and that foreign exchange from remittances can ever affect remittance-recipient country's trade balances at the country level (Le Heron & Yol, 2019). Le Heron and Yol (2019) indeed indicates that growth in the flow of remittances to the Asia-Pacific countries leads to imbalances in trade among its member countries. Furthermore Le adds that remittance inflows to Asia-Pacific region have statistically significant negative impact on their trade balances. There is evidence in this regard in Egypt, Portugal, and Turkey.

Lucas (2006) indicates that an increase in remittance inflows significantly correlated with the increase in the real effective exchange rate over a decade among the Philippines, adding that export growth typically moved rapidly in tandem with real exchange increases. In several instances however, it is speculated that parts of remittance-receipts are spent on new imports, which lessen the upward impact on the exchange rate of the domestic currency. It can further be argued however that the imports of critical inputs can be used to promote domestic firm's productivity and competitiveness on the international market.

Remittances facilitate the relationship between trade and government consumption in the Middle Eastern and North African (MENA) countries with regard to trade deficit, after controlling for other drivers of trade deficit, such as income, inflation, exchange rate, and institutions. Thus in high-remittance-recipient countries, trade negatively affected government consumption and in low-remittance-recipient countries, by contrast, trade positively affected government consumption. This gives credence to the fact that remittances can reduce the fiscal cost on government budget associated with adverse trade shocks (Kevin & Fabien, 2021). Large inflow of remittances reduces fiscal cost on government budget, and this is mostly accompanied with negative trade shocks (Williams, 2021). Subsequently, trade seems to cause a reduction in government consumption in large remittance-receiving countries, while it increases government consumption in countries with low remittance-receipt (Kapur & Singer, 2006; Ebeke, 2011).

Remittance inflows robustly nurture trade deficit of 11 countries (Farzanegan & Hassan, 2020). Furthermore, Farzanegan et al. (2020) confirm that recipients of remittance spend large proportion of their remittance inflows on leisure or on non-traded goods, which intends to shift investments and productive resources from the tradable to non-tradable sectors, thereby occasioning a decline in the production of manufactured goods and invariably to the folding up of local manufacturing concerns. The stifling of manufacturing concerns results from of trade deficit, which leads to joblessness and lowering standard of living eventually. Unemployment ignites poverty and the search for greener pastures. This is the major cause of migration and labour mobility thus increasing remittance flow.

Beyond the fact that remittances finance imports, the sequence of occurrence of remittances and trade leads to a culture of continuous dependence on remittance income to the detriment of increasing production and the prowess of local industries to export thus impeding the growth of the economy of remittance-recipient countries. As this phenomenon may only facilitate the economic well-being of remittance-recipient individuals and families, it remains critical therefore that these individuals and households, beyond the remittance they receive, should rely on more tangible economic activities as sources of income for their everyday sustenance which inure to economic growth. Figure 19.5 provides an illustration of relationship between remittances and international trade.

## 19.6 Summary and Conclusion

Remittances remain extremely beneficial to African countries; however, overrating its benefits and showing its development potential in total sense may be misleading. Although the literature does not suggest a clear relationship between remittances and trade, some empirical studies show a positive relationship while others show a negative effect. In some of the studies remittances affect trade through exports and imports. These effects are mainly country specific and due to economic growth prowess. It is obvious that remittances encourage the flow of foreign exchange within the recipient countries; however, increase in foreign exchange beyond certain thresholds leads to an appreciation in the value of the domestic currency, making the recipient country's exports become expensive for its international buyers and with cheaper importation quotation. This occurrence ignites an increase in the demand for foreign goods as against locally produced ones such that it negatively affects domestic industries. It even gets worsened by the expensive unattractive export; once domestically produced goods are not patronized, this affects a country's trade balance, as industries will be forced to lay off workers, hence negatively impacts employment. Unemployment encourages migration just as trade. Trade is vital to Africa's development, and trade encourages migration.

In conclusion it is worth noting that while remittances and trade can rub-off on each other, it is important to highlight issues that underscore the key role of remittances and trade as drivers of economic growth. Migrants from the diaspora are the main source of remittance flow thus remittances and international trade improvements and transformation policies cannot be made in isolation in the wake of positive effort at substantial development and massive migration. These transformational policies towards macroeconomic and regulatory strategies with respect to global trade are strategic as migration increases remittance inflows—ensuring their harnessing for sustainable development and poverty reduction is key. These are never spontaneous. It requires remittance and trade policies that are dynamic to manage their excesses, policies that are inclusive and responsive to both opportunities and constraints in regularly changing national, regional, and global perspectives. Meanwhile, as an

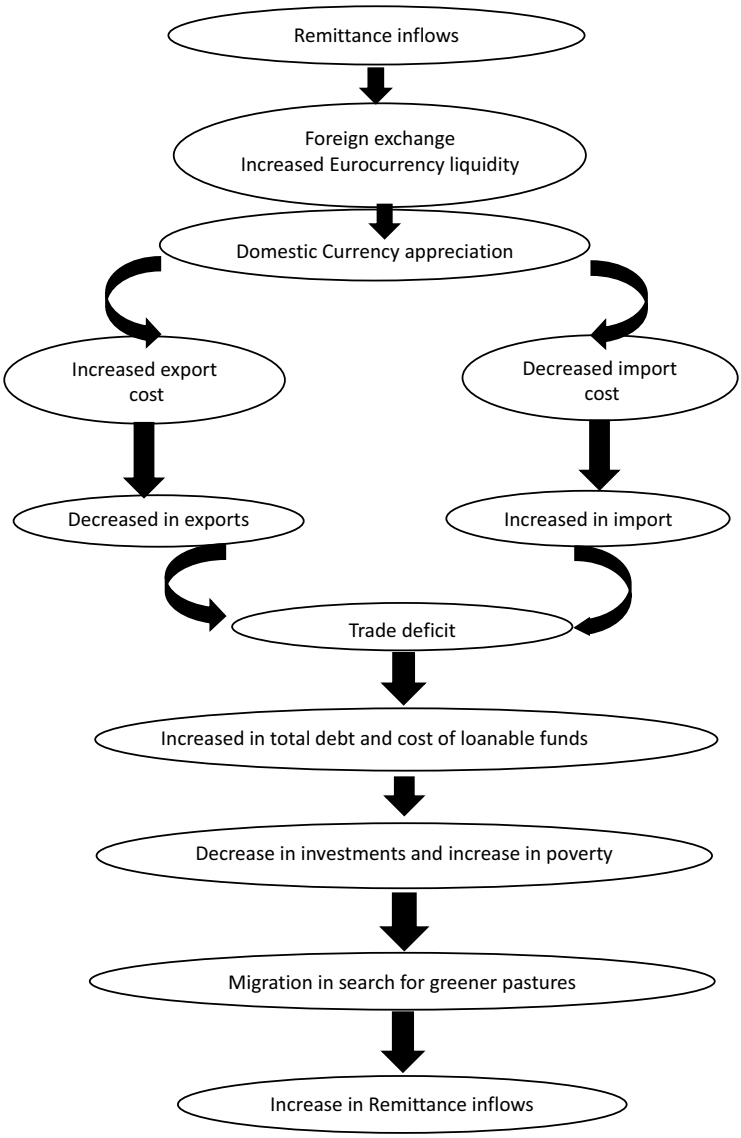


**Fig. 19.5** Remittance flows and trade relationship. (Source: Ideas gathered from existing literature)

emerging market like Africa that seems to be experiencing rapid growth, trade improvement and transformational policies are imperative. Trade may likely affect financial integration of emerging economies as it presents new prospects for growth, and for Africa, as such, the prospects for private capital inflows like remittances need to be exploited in its entirety while aid flows are inexact.

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CHAPTER 20

# Gender and Trade in Africa

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## 20.1 Introduction

The WHO[1] has defined gender as the characteristics of males and females that have been set up by society. The social construct of gender as expected varies from place to place and over time. Elson and Seth (2019) asserted that in most parts of the world, people live in societies characterised by more inequality and discrimination than two decades ago. Discrimination may be along the lines of race, gender, social status, and education. People who are marginalised are mostly deprived and do not get a fair share in the scarce resources of the economy. The economy may expand without bridging the gap between the privileged and the marginalised.

There has been a significant increase in growth in most countries since 1980; however, the data shows that growth and income is not distributed evenly among households. We see the top 10 per cent earners accounting for more than 30 per cent of income shares in Europe, China, Russia, Canada, and the United States of America (Randriamaro, 2006). In less developed economies like Brazil, India, Middle East, and Sub-Saharan Africa, the inequality gap is

[1] https://www.who.int/health-topics/gender

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_20

much deeper with the top 10 per cent earners controlling more than half of the income shares. Growth, therefore, in itself does not necessarily bridge the gap between the rich and the poor. For growth to correct the inequalities, there is the need for deliberate policies that would ensure that the benefits of growth are shared fairly across societies and opportunities are available to all. Concerns about the uneven distribution of growth in the economy have led to the birth of the concept of inclusive growth. Inclusive growth has been defined differently in the literature; however, broadly speaking it refers to a state of growth where the whole population benefits: the poor and rich, men and women and children. The distribution of benefits from development and trade policies has become an important phenomenon in the context of globalisation (Korinek et al., 2021; Schwab et al., 2017; Assembly, 2015).

The 2030 Agenda on Sustainable Development goals of "sustained, inclusive and sustainable economic growth" seeks to push for income equality among the different income classes and across gender lines (Halisçelik & Soytas, 2019). Gender disparity plays out in an economy through the division of work, rights, and responsibilities, and allocation of resources between men and women. The gender gap in wages and work opportunities in developing economies is wider than in developed economies (Randriamaro, 2006). The ratio of female to male earnings computed by the World Bank is less than one; 0.8 in developed economies, 0.7 in developing economies (Korinek, 2005). The wage gap, which is 1 less the female to male earnings ratio, averages 0.23 in developed economies and 0.27 in developing economies (World Bank, 2001). This shows that economic growth and development does not necessarily bridge the gender wage gap.

The genesis of inequality is set in motion by society at birth. In most developing economies the girl child has less access to education and those who have formal education are not able to rise to the heights of their male contemporaries (Ghosh, 2022). The gap continues to widen as the men are more skilled and more likely to have better chances of getting into more rewarding jobs and earning higher wages. Also due to the low skill set, the women may not have the opportunity to rise and specialise in the institutions that they work. With less income, women are not able to acquire tangible assets that could serve as collateral in accessing to credit to expand their businesses. In most sectors, we see women trailing behind their male counterparts in terms of the roles and opportunities available. In developed economies, the focus on girl child education has seen women take the lead in education; however, the gender gap exists as women engage more in unpaid work and advance slowly in paid jobs (Korinek et al., 2021). Per the World Population Prospects in the Population Division of the United Nations Secretariat (1998), men are about 50.3 per cent of total population yet they control more than 60 per cent of the global GDP, a reflection of the earnings gap between the male and female population. Also, from the Global Gender Gap Report, as discussed by Schwab

et al. (2017), many countries have made significant progress in parity in social, economic, and political settings; however there are still significant income gaps between men and women. The Global Gender Gap Index, which measures gender-based parities on a scale of 0 to 1, shows that there is an average gender gap of 0.32 (32 per cent) that remains. The subindex of Gender Disparity on Economic participation and Opportunity Gap shows a higher gap of 41.9 per cent.

In the literature, economic growth and development is considered a gender-neutral process. In developing countries, where women generally earn lower than their male counterparts, employers would not want to build capacity and skills in their female employees. The increase in their productivity may be appreciated but would come at a higher cost. The capacity building of women employees would eventually lead to higher wages. As the women employees also become skilled they would require higher earnings just as their male counterparts, increasing the cost of production and reducing the price competitiveness of the firm's output. In a growing environment, there are better opportunities for highly skilled labour, and where gender norms do not allow women to be skilled, the income gaps remain large and unbridged. It has been stated that women are likely to catch up to the men in 257 years if nothing is done to empower women quickly (World Economic Forum, 2019). Proponents of gender-inclusive growth have therefore called for the explicit inclusion of gender in policies to improve the welfare of women and bridge the income gap between men and women.

As economies develop, trade becomes increasingly an important factor in the growth process (Ghosh, 2022). Trade propels growth by increasing employment opportunities, increasing the goods and services available, and raising the standard of living of people (Korinek, 2005). Trade liberalisation has been empirically proven to lead to industrial development. Some studies have shown that trade openness leads to a rapid pace of growth; however, this growth entrenches inequalities and could be detrimental to the welfare of the marginalised (Lee & Park, 2002). The extent to which trade impacts gender remains unclear, and it is yet to be proven in the literature (Korinek, 2005). This chapter seeks to study the important issue of gender equality and trade in Africa by specifically examining the impacts of trade and trade policies on women. This is essential for policy intervention on how trade can support women and address the gender inequality gap. The rest of the chapter is structured as follows: Sect. 20.2 discusses the impact of trade on women's economic empowerment, Sect. 20.3 explains the approaches to gender and trade; Sect. 20.4 looks at gender and trade in development policy; Sect. 20.5 considers the development of gender-sensitive trade policy, and finally Sect. 20.6 concludes the chapter.

## 20.2 Impact of Trade on Women's Economic Empowerment

Trade benefits society by providing more jobs, making more goods and services available, and providing more business opportunities. To assess the impact that trade has on gender issues there is the need to consider how trade benefits the woman as a worker, a utility-maximising consumer, and a profit-maximising entrepreneur (Korinek, 2005). Export-dependent jobs are mostly taken up by men. In OECD countries 27 per cent of women jobs are related to international trade, whereas 37 per cent of the men are actively involved in trade. Even in developed economies, women are hardly in such jobs, and the few that are in businesses or jobs that exports goods and services earn less than the men in the same industry. In some OECD countries, firms that are engaged in international businesses have a wider income disparity than firms that are engaged in the domestic economy only (Korinek et al., 2021). Firms that are into international business pay more, and as women get empowered to acquire the skills and competence to work in these firms, they are likely to earn more. In Africa, through AfCFTA intra-regional trade would increase and increase in incomes are expected. The World Bank has projected that by 2035, through the increase in trade under AfCFTA, the wages of skilled female workers would increase by 4 per cent compared to the 3.2 per cent increase in the wages of skilled men.[2] Trade is capable of enhancing women's economic outcomes and equality by improving employment and wages, offering better jobs, and lowering costs. In both emerging and developing economies, workers in the tradable sectors tend to be more likely to have formal employment, offering them opportunities for benefits, training, and job security (World Bank, 2020).

Defining the impact of trade on women as a consumer may not be clear cut. Trade brings in more goods giving all consumers the option to choose. Trade draws down prices as the domestic producers due to competition decrease prices to match up low prices of imported items (Broda & Weinstein, 2006). As trade brings in more of goods and reduces prices of domestic goods, women with their lower earnings can afford to buy more for their households, giving them a higher purchasing power. Trade liberalisation improves the livelihoods of women by giving them alternatives of items to purchase for their households and their individual consumption despite the earning gap. Trade openness therefore leads to improvement in women's welfare. Items consumed by women tend to face higher tariff burden compared with those consumed by men. For instance, in the US, the tariff burden on textiles purchased by women was US$2.77 billion higher compared with men's clothing, and this has led to increase in the gender gap, in real terms, about 11 per cent between 2006 and 2016 (Gailes et al., 2018; World Bank, 2020). Therefore, trade liberalisation in the form of removal or reduction of tariff should be well targeted to lower the

[2] https://www.imf.org/en/Publications/fandd/issues/2023/06/trade-drives-gender-equality-and-development-rocha-piermartini

costs for women consumers and improve their welfare. The IMF has projected that trade openness through the elimination of tariff raises the income of the female-headed household by 2.5 per cent. In absolute terms, this increment compares with the share of incomes spent on education and health. Women consumers would benefit more when there is reduction in the tariffs on gender items such as women apparel and maternal items (Korinek, 2021). Data on imports are hardly disaggregated by gender and gender-specific items; also there is the need for more work to be done.

Women in international business may be affected directly as entrepreneurs. Mostly women operate on a small scale and can hardly meet the needs of the domestic market.[3] They are limited by lower capital and limited access to finance. Also they relatively lack the managerial skills and knowledge to meet requirements of the international market. Mostly in developing economies the women spend much of their time on keeping the home and engaging in other forms of unpaid work which limits the time available for building their businesses for the international market. There has been a call for policies and programmes that would increase the participation of women in trade. Available data shows that women are mostly in SMEs, which limits their ability to benefit directly from international trade. However, indirectly the women in SME can benefit from trade as they join networks and sell to exporting companies. Some women find themselves actively involved in the provision of inputs and service for the production of tradable goods. The high cost of participating in trade has impeded women in actively and directly taking part in international trade. Digitalisation of trade is reducing the cost of international trade and this should open up more opportunities for women. There is the need for women to be empowered to take up the opportunities that trade brings. In developing economies, women are involved in the production of primary agricultural produce, textiles, apparels, and other local artefacts. These products are exportable and could have demand on the international market, and as their products get access to international market through trade, they get empowered as they have higher earnings. Firms that are engaged in international trade undergo regular restructuring as the demands on the international market is everchanging. There is therefore the need, for women led entreprises who want assess to the international market need funds and the know how to keep abreast with the dictates on the international market.

Trade liberalisation is also associated with the acquisition of education and skills (i.e. human capital), and enhanced gender equality (Schultz, 2008). Trade creates incentives for various economies to increase women's legal rights and their ability to access very important resources, including education and technology. Increased women's rights can help in promoting trade, leading to a bidirectional causal relationship between improved trade and gender equality. On the other hand, increased gender inequality brings about lesser product and export diversification, especially in developing economies, where there

[3] https://www.oecd.org/trade/topics/trade-and-gender/

are gender gaps in education and the labour market and this reduces initiative and innovation (Kazandjian et al., 2019). The important role of services in the world economy and trade, the growth in global value chains, as well as new digital technologies adoption tend to create opportunities for women to benefit from trade. Increasing the productivity of women in such sectors is critical in bridging the gender gap, particularly with respect to most vulnerable women (World Bank, 2020). However, women only can experience the positive impacts of trade, provided the barriers that restrict them back are removed, and suitable policies to address adjustment costs are implemented.

## 20.3 Approaches to Gender and Trade

The discussion on the relationship between gender and trade stems from earlier works on gender equality (Korinek, 2005). These have evolved over time, and gender activists and other civil organisations have pushed for equality for women and have proposed different approaches as to how gender can be incorporated into the development process and specifically to trade. Randriamaro (2006) discussed these approaches as follows.

### *20.3.1 Women in Development Approach*

The first approach that emerged was the Women in Development (WID) approach in 1960. Under the WID, it was acknowledged that there are negative impacts of growth and trade on women, and specific policies and initiatives were needed to tackle them. The WID approach, also known as the "add women and stir" approach, does not seek trade policies that favour women but acknowledges that trade openness positively impacts the economy and seeks to enable the woman to take advantage through their role in the labour market. Critics of this approach indicated that this approach accepts the social construct and status quo trade policies and then find a way to integrate the women ex-post into development and trade policies. It helps address the concerns of women at the micro level without incorporating gender inequality at the macro level ex-ante when these future trade policies are being drafted. The limits of the WID led to the development of the Gender and Development (GAD) approach.

### *20.3.2 Gender and Development Approach*

Under the GAD approach, the differences between men and women in terms of the roles they play in the economy and the differences in benefits are factored into the trade and development policies. This approach is a proactive approach that has a broader view than the WID, which is limited at the micro level. The GAD focused on women as resources that have not been fully tapped towards development. One key advantage of GAD over WID is that GAD focuses on how both men and women can be given an even ground to

participate in the development process and reap of the benefits in an equitable manner. However, GAD could not fully bridge the income gap and gap between men and women in trade policies, and this gave way to the human rights approach.

### *20.3.3 The Human Rights Approach*

The human rights approach has been convened by civil society groups. They have called for a more humanitarian and people-centred approach in the design of policies and programmes regarding economic growth and trade. This approach does not consider trade as movement of goods and services across borders only but a transaction that can affect equity, poverty reduction, and human rights. Under this approach, the marginalised may benefit from special aid, debt cancellation, and the promotion of fair trade. The human rights approach may not be mutually exclusive from the other approaches; it however stresses the importance of addressing the issues of gender and economic development along the lines of the human rights of the woman.

### *20.3.4 The Gender and Political Economy Approach*

The gender and political economy approach is an alternative approach that has been promoted by feminist organisations and researchers. The proponents of this approach have argued that gender and other inequality issue should be considered in trade negotiations both at the national and international levels. Advocates and feminist organisations and networks such as the Gender and Economic Reform in Africa (GERA)[4] have fronted the gendered political economy approach. Under the GERA, economic policies analyse all economic and trade policies from a gender perspective. In situations where policies do not favour women and rather reinforce the wage gap, an alternative is brought forward to give economic justice to women (Cook & Roberts, 2000). This approach suggests that all policies, trade, fiscal, monetary, and social policies be accessed thoroughly to ascertain their impact on the livelihoods of women. This requires more research by feminist organisations and women groups to propose macroeconomic policies that are gender equitable (Randriamaro, 2006).

## 20.4 Gender and Trade in Development Policy

Despite the approaches that have been proposed to merge gender issues with trade and development policies, we see very little progress in many developing countries. Most trade policies continue to focus on trade liberalisation and reduction of tariffs. These policies promote trade and growth; however, in themselves they are gender neutral, and the extent to which men and women benefit from these are determined by the social construct of the roles that

[4] https://twn.my/title/twr122i.htm

women play in the economy. Most national programmes and development plans support women softly by promoting girl child education, maternal health care, and women empowerment, but beyond this, only few countries have explicitly included gender equality into the national plans and budgets.

### *20.4.1 Gender Equality and Trade-Development Goals*

The inclusion of gender equality and women empowerment as the Millennium Development Goal was a call for nations to prioritise gender issues in the economic process. The Millennium Development Goals (MDGs) were the focus of development at the international front, and Goal 3, which was to promote gender equality and empower women, was to play a key role in bridging the gender gap. This goal has been reflected in some specific goals such as promoting the education of the girl child and getting more women into occupations that were male dominated. The interpretation of MDG 3 was not applied to all the other development goals. MDG 8 addressed the issues of global partnerships through trade. Under the Sustainability Development Goals (SDGs), there is a more integrative approach to development and efforts are being made to achieve full gender equality and eradicate poverty. The benefits of global trade can be enjoyed by all when it leads to improved market access for all and competitiveness for exports of the poor and the marginalised (Assembly, 2015).

At the national level, different approaches have been employed. In some countries, we see more women stepping into key roles in the political space and they tend to advocate for gender-sensitive trade policies and mainstreaming in the development process. In some other countries like South Africa, institutions have been set up to consider the impact of trade on the growth and its impact on women. Trade brings in a lot of cheaper consumables for the household, and some women lose their jobs as trade compete their employers out. In some jurisdictions anti-dumping measures have been adopted to protect the jobs of local industries especially those in sectors that employ women in their labour-intensive processes. The livelihoods of women in such instance are protected by trade policies. In other developing countries, like Uganda, Ghana, and Kenya we see multi-stakeholder institutions and civil society organisations that are engaged in the planning process, and they actively assist in the drafting of national trade policies. These institutions are in collaboration with other civil society networks in different countries and are equipped to push for gender issues at the international and national levels. In Zambia and Rwanda, the issue of gender has been intertwined with planning at the national level, and in the budget a line has been set to finance the gender equality agenda.

The active participation of civil society organisations has also been well institutionalised in developed economies, such as the United Kingdom. Officially, an advisory body that is made up of women from different government institutions was set up to ensure that gender issues are fully incorporated into the UK/EU trade policy. Trade policies that are built through this participatory

and inclusive process are most likely to be equitable. Notwithstanding, the successes of this approach, through trade liberalisation the global trade system has become complicated with multiple agreements and treaties. There is a need for these civil societies to push for capacity building of women on the technical and legal issues of trade as this would ensure their continuous participation.

*The New Aid Mechanism*

Most developing economies have high public debt stock as they depend on foreign aids to close the infrastructure gap and other rising expenditures amidst low domestic revenue mobilization. The bilateral and multilateral donors play a key role in the implementation of the development plans of these economies. Globally, there has been a call for aids and grants to be channelled towards growth and poverty reduction. The focus on poverty reduction has led to the implementation of an all-inclusive growth and the gender equality agenda.

Through the new aid mechanism donors are to support development at the national level either through Sector-Wide Approaches (SWAPs) or Direct Budget Support (DBS). Under SWAPs donor agencies support directly a specific sector in the economy such as trade, whereas under DBS support is given to countries to bridge the fiscal gap in their budgets. SWAPs are specific and could serve as a great platform for donors to push the gender equality agenda; however this has not been the case. Most donors are pushing for gender mainstreaming, thus failing to address the gap between men and women with regard to education, access to opportunities, income, and access to goods and services. The new aid mechanism would only be effective in promoting gender if resources are allocated efficiently to designated sectors dominated by women and gender mainstreaming of all other sectors such as trade is promoted (Van Reisen, 2005).

*Trade Policy Review*

The World Trade Organization (WTO) is globally recognised as the organisation to address issues on trade among nations. Through the Trade Policy Review (TPR) Mechanism, the WTO has ensured that the complex trading negotiations among nations run smoothly. The TPR allows for review of country trade policies, and this brings up for discussion the impact of trade on poverty reduction and the welfare of the vulnerable. The TPR can help address the impact of trade on the livelihoods of women both at the national and international levels. In line with this, ACP countries, 48 Sub-Saharan African, 16 Caribbean, and 10 Pacific countries, signed up onto the Sustainability Impact Assessments (SIA). The SIA assessed the benefits of trade on poverty reduction and development at all levels. Members of the EU and other developed economies have embraced the SIA; however a few developing economies are yet to use these assessments. These economies therefore are yet to fully link trade policies and growth to gender disparity.

To appreciate the benefits of trade, there is the need to look at what trade means for different people along the value chain. The value chain encompasses

all the processes of gathering inputs, the production of the output, and the delivery of output for the consumption by the final user. The value chain analysis on the impact of trade would highlight the differences in the opportunities and challenges available to men and women along the value chain (Carr, 2004). Along the value chains in the production of export products, women play a key role in gathering the raw materials; however, they do not earn as much as their male counterparts. In West Africa, the export of shea nut butter has become a profitable venture. A lot of the small-scale producers are women in the smaller communities. The women who may be ignorant of the role they play in this global value chain are not able to take opportunities of trade liberalisation and demand higher wages so as to bridge the wage gap.

The Task Force on Gender and Trade of the United Nations also proposed the establishment of Gender Trade Impact Assessment (GTIA) to ensure that policy makers are gender sensitive in designing trade policies (Kozul-Wright & Rayment, 2004). GTIA was to focus on the development of the trade agreement provisions that were gender sensitive and ensure equality between men and women. These provisions were to ensure that women can be educated and empowered to take up the opportunities of trade liberalisation. There could be programmes that would improve the skills of the women in their activities along the value chain, and this would set in motion a cycle that would bridge the wage and opportunity gap. Trade programmes that also push for the primary producer to benefit fairly along the value chain would have a great impact on the livelihoods of the women. In Ghana, under the Kuapa Kokoo cocoa cooperative the women in the local cocoa-producing areas have been encouraged to play other roles along the value chain. The female cocoa farmers collectively have earned more income from their produce and have bargaining power at the national and international levels (Tiffen et al., 2004). For trade to benefit women through empowerment and opportunities, there is the need for schemes that would compensate them fairly and empower them to move from the small scale of raw material production to key global market players (Randriamaro, 2006).

Trade increases offers jobs as more opportunities and activities are created along the global value chain. The labour standards along the complex global trade system have been a concern for most civil societies and activists. Some concerns have been raised considering how trade liberalisation waters down incomes and "crowds out" jobs of the local people; this has been the driving force behind protectionism. The International Labour Organization (ILO) fronts the protection of workers through fundamental and human rights conventions. These conventions are binding on members and are in place to ensure that individuals can exercise the right to work and free from any form of discrimination (ILO, 1998). These conventions are being enforced at the international level and not down at the national level.

Discriminations still take place in the workplace, and in some production sectors the labour standards favour men as the breadwinner of households (Orloff, 2002). Women may be paid lower wages and may not benefit fully

from packages such as health insurance and maternity leave. Although women in an organisation through the labour union may benefit from standards that improve the livelihoods of workers in general, they are limited in addressing the wage gap and some gender-specific issues. The women in the informal sector are completely excluded and cannot benefit from the enforcement of ILO conventions. Although most labour unions are dominated by men, there are a lot of advocacies for gender issues such as childcare and sexual harassment in recent times. There is however the need for gender and trade issues to be incorporated into labour standards at the national level as in the case of the Ghana Agricultural Workers' Union and the International Confederation of Free Trade Unions at the global level (Randriamaro, 2006).

*Building Capacity of Women*

Most women are in the informal sectors of the economy managing small-scale and micro enterprises. Those along the value chain of primary products operate on very small scales and are not able to capitalise on the gains of trade liberalisation. There is the need to identify the gaps in the know-how and competences of women. Advocates and civil society organisations through specially tailored projects have helped build the capacity of women. As women increase their technical and managerial skills, they can increase their operations giving them a voice and bargaining power in the global trade system. In Kenya, the Women Entrepreneurs for Industrial Growth, a programme by a civil society, has benefited more than 5000 women in acquiring relevant skills in managing and growing their enterprises. This has increased the wages of the women and their scale of operations with about 40 per cent of them exporting their produce (Peters et al., 2004).

Other programmes have also focused on training women to diversify their enterprises to ensure financial independence. International organisations such as UNCTAD and ILO have also empowered women in developing economies to improve their activities and export value-added products instead of raw primary products. At the sub-national level some NGOs encourage entrepreneurship and trained women in crop production to increase their outputs for local and international markets. A local NGO, in the Independent State of Samoa, is known for training female local coconut oil and equipping them with the technical know-how to produce virgin coconut oil for exports making them trade ready and trade worthy. This has given them opportunities to earn more and acquire assets (Carr, 2004). Most of these training sessions are done in groups fostering great relationships of producers of similar or related products.

Over time, great networks are formed giving the women producers greater access in the global trade system. Beyond the trade-worthy and trade-ready trainings, there is the need for these initiatives to address the issue of access to credit. Women could leverage on networks and source for funds in a pool. The women individually may not be able to take up the advantages that trade liberalisation bring if they do not have enough capital or can access capital at high rates. Group financing may be a great opportunity for women in organised groups and networks to access loans at relatively lower rates.

## 20.5 Development of Gender-Sensitive Trade Policy

The global trade arena is a rather complex one; negotiations and interpretation rule make it difficult to integrate fully the issues on gender. Although difficult, it is possible for women activists and civil societies to make significant contribution in the preparation of trade programmes at the international level (Randriamaro, 2006). This calls for more research and information gathering on gender-related issues and measures to increase market access to women. At the national level, as countries position themselves to benefit from trade liberalisation, there is the need to focus on the benefits of empowering women along the global supply chain. These benefits would lead to an inclusive economic growth.

Stakeholder engagements prior to the drafting of trade negotiations and policies should include women organisations as well as other pro-equality groups (Duflo, 2012). Earlier approaches in integrating trade and economic development were not successful as most initiatives were carried out in silos by different agencies. A comprehensive approach done at all levels would succeed in gender mainstreaming of international trade so that the voices and concerns of women can be heard. Without this approach the specific challenges of women in entrepreneurship, fair trade, and international market access would remain problematic. Women associations of workers and producers who have broken through the barriers need to focus on building capacity and supporting other women to improve their livelihoods (Carr, 2004; Tiffen et al., 2004).

At the international level, other international agencies that are concerned with gender and development need to collaborate with the WTO to table gender issues when key policies are being made. These policies should be well interpreted to member countries so that it can be well enforced through the gender ministries and agencies. In 2017 members of WTO agreed to a joint declaration on Trade and Women's Economic Empowerment.[3] Although this is not binding on member states it has brought trade and gender issues to the fore in bilateral and regional trade agreements. The dialogue on gender issues and trade needs to be continuous and enriched by research and stakeholder engagements of civil societies and other women groups. This would ensure that trade and growth policies are gender responsive.[5]

Also, engaging the private sector is necessary for realising women's economic empowerment. The adoption of voluntary gender-related initiatives by some private business, including suppliers and retailers, has helped women in accessing skills development, health services, maternity benefits, education, leadership, and financial management training. Other firms also develop a database of potential certified female-owned suppliers with the aim of diversifying suppliers they source goods and services from (Schott, 2017). Such private sector initiatives may be part of government partnerships or international initiatives (World Bank, 2020).

[5] genderdeclarationmc11_e.pdf (wto.org)

## 20.6 Conclusion

Trade liberalisation has been observed to propel economic growth through innovation, higher productivity, and creation of more job opportunities with higher wages. Economic growth through trade openness has not been all inclusive, and inequalities still exist. For trade to lead to an inclusive growth where the livelihoods of all are improved, deliberate policy actions must be taken.[6] These policies would have more impact in developing economies due to the wider wage gap and the underutilisation of women as a resource for growth.

Despite the lack of gender trade disaggregated data, there is the need for more research to be carried out on appropriate gender-responsive trade policies on a global front. The Joint declaration on Trade and Women Empowerment in 2017 by member states was a step in the right direction. Member states agreed to make trade and development policies more gender sensitive; however, this was not legally binding. At the national levels there is the need for governments to include these issues in the development agenda and in detailed reports such as development plans and the national budget to empower women through training and financing so as to position them as key players along the global value chain.

There have been some gains in the gender-inclusive trade and development; however, the COVID-19 pandemic and the Russian invasion of Ukraine have eroded some of these gains and highlighted some vulnerabilities that women are more prone to. The global value chain has undergone some changes in recent times; one of these is the digitisation of international trade, and this can create more trading opportunities at lower cost. Adversely a lot of women have also lost their jobs, and some had to resort to non-paying jobs and quit work to take care of the home as care-giving centres of children were closed in most parts during the pandemic. There is the need for women to be equipped with more skills that would give them the ability to shift to different sectors of the economy even during crises. There is certainly the need to promote trade and gender equality through appropriate policies and transparent trade.

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CHAPTER 21

# The Effect of Pandemics on Trade: Case of Covid-19

*Gordon Abekah-Nkrumah, Patience Aseweh Abor, and Edwin Atitsogbui*

## 21.1 Introduction

The sudden outbreak of the COVID-19 pandemic wreaked havoc on several economies throughout the world, causing lockdowns and shutdown of numerous businesses and industrial facilities and consequently impeding the normal flow of goods and capital (World Bank, 2020c). The economic slow-down continues to this day and is projected to have a major and far-reaching global economic cost, mostly due to supply chain and trade disruptions (Baldwin & Di Mauro, 2020), which directly or indirectly affect the volume and direction of global trade (United Nations Conference on Trade and Development, UNCTAD, 2022; Verschuur et al., 2021). For example, existing evidence suggests that the recent COVID-19 outbreak had a significant negative impact on trade, thus reducing global merchant trade by 7% in 2020 (United Nations, 2020). This is by far the biggest fall after the 2007–2009 Global Financial Crisis, where trade fell by 22% in 2009 (World Trade Organization, WTO, 2021).

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_21

Although there is scarcity of scholarly work on pandemics' or epidemics' (e.g., SARS, HIV/AIDS, H1N1 influenza, Ebola) implications for trade, a large body of literature has emerged since 2020 after the COVID-19 outbreak in 2019, to examine the impact of the COVID-19 pandemic on trade (see, e.g., Barua, 2020; Hayakawa & Kohei, 2021; Verschuur et al., 2021). Barua (2020) predicted that the COVID-19 pandemic would affect trade relations, globalization, and trade patterns, where some economies would win and others would lose.

Since this prediction, there have been several empirical studies on the implications of the COVID-19 pandemic for trade, albeit most of them are restricted to the short term (Lin & Zhang, 2020; De Lucio et al., 2020; Büchel et al., 2020; Hayakawa & Kohei, 2021; Verschuur et al., 2021). Lin and Zhang (2020) found that COVID-19 had an immediate negative effect on exports. The negative effect is attributable to a significant decrease in trade connectedness, linkages, and density between nations, occasioned by the COVID-19 pandemic (Vidya & Prabheesh, 2020). There are equally studies that suggest that trade was expected to fall by 8%, 17%, and 20% in economies with V-shape, U-shape, and L-shape recovery respectively from the adverse effects of COVID-19 (Bekkers & Koopman, 2020). Also, data from the General Administration of Customs of China indicate that exports fell by 17.2% from January to February of 2020 compared to the same period in the previous year (GACC, 2020). There is also evidence that agricultural businesses witnessed a drop in average exports as a result of the COVID-19 pandemic, with some countries needing as much as five years to return to normal export levels. It is believed that the impact of COVID-19 on trade was more pronounced for trading partners who have wider income disparities, more linguistic and cultural barriers, and fewer political relations (Baldwin & Tomiura, 2020; Fernandes, 2020).

Other studies have examined the implications of previous pandemics/epidemics (Ebola and SARS) for trade, and found that they resulted in significant increases in trade costs due to travel restrictions. In the specific case of SARS, it took a long time for tourism revenues to recover given that recovery was influenced by consumers' perceptions and fears of sanitary emergency in non-affected nations (see Keogh-Brown & Smith, 2008; Sadique et al., 2007).

This chapter takes advantage of the vast literature on the impact of the COVID-19 pandemic on trade as well as evidence from earlier pandemics/epidemics to comprehensively and coherently articulate evidence on the impact of pandemics on trade. The added value of this chapter lies in the fact that it has synthesized and comprehensively articulated evidence scattered across multiple papers. This indeed make it relatively easy for researchers to identify gaps to inform relevant research and also for policymakers to develop and deliver the right interventions to reduce the negative impact of pandemics on trade now and in the future. The discussion will focus on the impact of the COVID-19 pandemic on the global economy, how the pandemic affected the agricultural sector, the effect of the COVID-19 pandemic on foreign direct investment, the

long-term impact of COVID-19 on trade, and the comparison of the impact of previous pandemics on trade.

## 21.2 Overview of the COVID-19 Pandemic's Impact on the Global Economy

The COVID-19 pandemic is suggested to be responsible for significant unprecedented disruption in the global economy, and consequently, significant decline in economic growth, trade, and employment. This section provides an overview of the impact of the COVID-19 pandemic on the global economy, based on evidence from recent studies.

The literature examining the economic impact of COVID-19 reveals extensive disruptions experienced in various sectors and countries, emphasizing the multifaceted consequences of the pandemic. Industries such as tourism, hospitality, aviation, and non-essential retail were hit particularly hard due to travel restrictions, social distancing measures, and a shift in consumer behavior toward online shopping and digital services (Kolahchi et al., 2021; Pinilla et al., 2021; Jackson, 2021). These disruptions led to widespread job losses, reduced GDP, fall in investment, and significant challenges for businesses (World Bank, 2020c).

Furthermore, the pandemic exposed vulnerabilities in global supply chains, prompting businesses to diversify and regionalize their operations to minimize dependence on single suppliers or regions. This trend toward regionalization and diversification has the potential to reshape the global economy in the post-pandemic era, alongside increased digitalization and automation (Arriola et al., 2022).

The COVID-19 pandemic has impacted the economic growth of African economies through domestic and external channels. Prior to that, it was forecast that the average GDP in 2020 for African economies would diminish for the first time in 25 years. This had implications for the general well-being and level of poverty on the continent. The UN estimated that 30 million people could fall into poverty and many more could become acutely food insecure (Abor et al., 2022). The economic challenges faced by African countries include ineffective poverty alleviation strategies, hindered economic growth, and increased dependence on external financing (African Development Bank, 2020). The literature also highlights the need for effective fiscal and monetary policies to mitigate the adverse effects of the pandemic on vulnerable populations and promote sustainable economic recovery (Asare & Barfi, 2021).

Lastly, the COVID-19 crisis had notable environmental implications. On the one hand, the pandemic led to a temporary decline in greenhouse gas emissions due to reduced industrial activity and transportation. On the other hand, it also created new environmental challenges, such as increased use of disposable products and disruptions in waste management systems (Amirova et al., 2021). This highlights the need for a comprehensive approach to addressing

both the economic and environmental consequences of the pandemic in the recovery process. Projections and estimates of the impact of COVID-19 on the global economy are presented below.

The COVID-19 pandemic's effects on the global economy are widely known. For example, the International Monetary Fund (IMF) estimated in its 2020 World Economic Output Report that the global economy had contracted by 3.2%, but was projected to recover by 5.9% in 2021 and 4.9% in 2022. However, countries in different geographical regions were expected to recover at different times and speeds due to variations in the pace of vaccinations and extent of economic policy support. By the end of October 2021, a number of significant economic and financial indicators had emerged on the nature and extent of recession economies were undergoing as a result of the pandemic. Signs of economic recession became a lot more pronounced in late 2021 with a rise in viral cases and the emergence of new and deadlier strains of the COVID-19 virus. This led to a downward revision of the 2021 economic forecast by some organizations (Platt & Colby, 2021).

Global poverty and food insecurity were also projected to rise permanently on account of the economic effect of the COVID-19 pandemic (Laborde et al., 2021). According to the World Bank (2020c), COVID-19 increased the number of people living in abject poverty by 88 million to 115 million during 2020. The IMF also estimated in October 2021 that the pandemic's economic effect reversed a decade-long trend by pushing 65 to 75 million people into extreme poverty. This notwithstanding, the IMF was rather positive and suggested that funding social initiatives to mitigate the pandemic's effects could lessen the number of people who will experience extreme poverty. The State of Food Security and Nutrition in the World Bank 2020 report estimated that the pandemic would lead to an increase in the number of undernourished people globally by 83 million to 132 million in 2020, with the poor in developing countries being the most vulnerable.[1]

In addition to the above, the IMF predicted that the slow nature of the recovery from COVID-19 would deepen disparities in living standards between developed and developing countries, with the economies of low-income and emerging markets registering the greatest losses. For example, at a time when per capita incomes were projected to remain below pre-pandemic levels for a number of years, and thus, affect productivity negatively, health systems were also overburdened with pandemic-related cases and therefore not able to pay attention to other disease areas (IMF, 2020).

The effect of the pandemic was anticipated to be worse in developing countries such as Latin America and the Caribbean (LAC) and Sub-Saharan Africa (SSA) (Ozili, 2020; Erokhin & Gao, 2020). The LAC region, for example, experienced slow growth (about 3% growth between 2014 and 2019) in the 6 years preceding the pandemic. Post-pandemic growth retardation led to a

[1] https://www.ifad.org/en/web/latest/-/what-impact-will-the-covid-19-pandemic-and-the-global-economic-downturn-have-on-world-food-security-

sharp contraction in employment and a significant rise in poverty and inequality (ECLAC, 2021). As in the case of the LAC countries, SSA suffered significant loss from the COVID-19 pandemic as countries in SSA took a much longer time to re-open their economies and recover from the pandemic (Aragie et al., 2021; Fairlie, 2020).

The COVID-19 pandemic equally led to a sweeping transformation in global production, marked by disruptions across economic sectors, altering pricing mechanisms, and shifts in employment patterns. These complex and predominantly adverse changes have been catalyzed by health and economic crises, operations, and economic activities worldwide. Key among these shifts is the significant disruption of global supply chains, affecting both the manufacturing and agricultural sectors (Sun et al., 2021; Arumugam et al., 2021), leading to decreased output, increased costs, and logistical challenges. The pandemic also resulted in a global economic contraction, marked by decreased output and deflation (Islam, 2021). According to the United Nations Industrial Development Organization (UNIDO) (2020), global manufacturing production decreased by around 6% in the first quarter of 2020 compared to the same period in 2019 due to the COVID-19 pandemic. A more significant fall of more than 11% occurred in the second quarter of 2020 as a result. This was the largest loss in global manufacturing production since the 2008–2009 global financial crisis when output fell by 14% in the first quarter of 2009. COVID-19's effects on many industrial sectors have been mixed. The food, pharmaceutical products, and necessities sectors were less impacted compared to other industries. Both developing and developed countries produced basic medicines at a moderately increased rate in the second quarter of 2020. Output of all major industrial sectors decreased significantly, particularly that of the clothing, machinery, and automotive industries (UNIDO, 2020).

Also the COVID-19 pandemic drastically changed the landscape of global employment, inducing a wave of significant job losses, transforming work structures, and changing the dynamics of the labor market (World Bank, 2020a). The disruption was mostly adverse, propelled by sweeping health and economic challenges. Amid the health measures undertaken to contain the virus and consequential economic contraction, countless jobs were lost globally, with industries and demographic groups being unevenly impacted. This resulted in an increase in underemployment, unemployment, and informal employment (also see Cortes & Forsythe, 2023; Izguttiyeva et al., 2021). Concurrently, the pandemic expedited the adoption of digital technologies, instigating a significant shift to remote work and intensified job insecurity while simultaneously opening up new opportunities. These changes necessitate a re-evaluation of existing socioeconomic systems and urbanization patterns (Archvadze, 2020; Stan, 2022). Beyond economic consequences, the pandemic's impact on employment had profound psychological implications, with a surge in layoffs and work-related stress contributing to deteriorating mental well-being and emphasizing the need for comprehensive policy responses that account for these impacts (Reme et al., 2021).

Additionally, the number of working hours was projected to reduce by 14% in the second quarter of 2020 compared to the fourth quarter of 2019. This decline was attributed to rising unemployment, working time reductions, temporary layoffs, and job-search discouragement (International Labour Organization, ILO, 2020). According to the International Labour Organization (ILO), in 2020, female employees particularly suffered from the crisis, putting their employment at a higher risk of being disrupted. The ILO estimated that workers in developing economies, particularly those engaged in informal employment, would suffer more effects than in prior crises.

According to UNCTAD, based on World Bank estimates, women in countries severely affected by COVID-19 were expected to have larger growth in unemployment than men. This is particularly evident in countries such as the United States where female unemployment doubled, as well as Lithuania and Latvia where female unemployment increased by 73% and 83% respectively compared to an increase in male unemployment of 55% and 38% respectively (World Bank, 2020a, 2020b). In sum, the COVID-19 pandemic triggered a substantial change in global employment, characterized predominantly by adversity, but also offering opportunities for innovative restructuring.

To alleviate the economic effects of the pandemic, the IMF at the time advised G-20 leaders to continue with supportive monetary and fiscal policies via a combination of fiscal support for people and businesses. The IMF in 2020 also advised G-20 leaders to participate in a coordinated infrastructure investment program to spur growth, and accommodative monetary policies, characterized by low interest rates and central bank programs to facilitate credit availability. The advice was on the basis that an increase in infrastructure spending by G-20 countries of 0.5% of their GDP in 2021 and 1% in 2022 through 2025 would increase global GDP by 2% in 2025, compared to growth of less than 1.2% for an unsynchronized approach.

## 21.3 The COVID-19 Pandemic and the Agriculture Sector

The literature on the trade impact of the COVID-19 pandemic suggests that the effect of the pandemic on agricultural exports was mixed. While some were affected positively, others were negatively affected. For example, Lin and Zhang (2020) analyzed the effect of the pandemic on agricultural exports and found significant disruptions to trade and supply chains. Similarly, Russian exporters, including those in the agricultural sector, faced economic challenges due to the pandemic (Volchkova, 2021), and Canada's agricultural exports and Lithuanian agricultural trade faced substantial challenges (Barichello, 2020; Petrylė, 2022) during the pandemic. Other studies in Ukraine (Boronos et al., 2020), China (Fugazza, 2020), Benin (Chabossou et al., 2022), and Ethiopia (Beyene & Gebrewolde, 2020) also suggest that COVID-19 caused substantial disruptions to supply chains and therefore trade and domestic business activities.

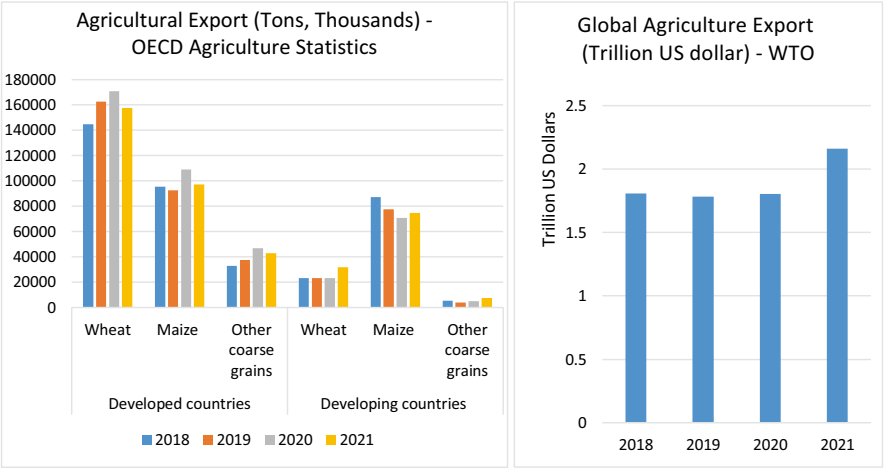


**Fig. 21.1** OECD estimates of agricultural (cereal) exports for developed and developing countries. (Source: Created by authors based on OECD Agricultural Statistics, 2023)

Notwithstanding the above, exports of some agricultural commodities, particularly grain and oil, remained stable and even soared at a point, revealing the resilience of the agriculture sector in the face of the crisis (Seleiman et al., 2020) and also indicating the essential demand for staple foods during the pandemic (Siche, 2020). For example, Barichello's (2021) follow-up study revealed a remarkable agricultural export boom later on during the pandemic.

Statistics for global agricultural exports (e.g., cereal exports) in developed and developing countries (see Fig. 21.1) show that although export of agricultural products reduced in 2019, it was nonetheless resilient during the peak of the pandemic. Using regional analysis, developed countries exhibited a robust rise in wheat exports from 2018 through 2020, despite pandemic challenges. There was, however, a slight drop in 2021, potentially signifying a shift in global demand. Fluctuations in maize and other coarse grain exports also exhibited similar dynamics. The significant surge in wheat exports in 2021 might indicate a recovery from pandemic disruptions or a strategic shift toward staple food production. Although maize exports decreased from 2018 to 2020, they increased marginally in 2021. This implies that the maize sector in some countries might have been more affected by the pandemic, probably due to labor and transport restrictions, or increased domestic demand.

## 21.4 Effect of the Pandemic on Foreign Direct Investment

The far-reaching implications of the COVID-19 pandemic have not only altered global trade but also reshaped the patterns of foreign direct investment (FDI). Recent research suggests a significant contraction in global FDI inflows

as a result of the pandemic, with the most affected economies being emerging economies (Koçak & Barış-Tüzemen, 2022; Fu et al., 2021). The complex interplay between the pandemic and the global investment landscape, in addition to other factors, has been responsible for the contraction in FDI flows. Heightened uncertainty stemming from the public health crisis, disruptions in global value chains due to stringent lockdown measures, and overall economic instability have together instigated a retreat in FDI activity.

The experiences of specific nations and regional blocs further underscore the nature of this change. For instance, the Visegrad Group and other European transition economies illustrate the urgent need to comprehend the pandemic-induced FDI decline and develop appropriate policy measures to facilitate economic recovery and progress (Tubić-Ćurčić, 2022; Kalotay & Sass, 2021). Meanwhile, countries like India encountered significant challenges in attracting FDI during the pandemic, notably due to the disruption of international supply chains, reduced investor confidence, and the negative impact of the pandemic on the nation's stock market (Dhingra et al., 2022; Prabheesh, 2021).

According to UNCTAD (see Fig. 21.2), global FDIs experienced a massive shift, with tangible declines observed across various regions. Global FDI inflows decreased by 42% in 2020 compared to the same time in 2019, with further declines anticipated in 2021. It is important to emphasise that the general decline in global FDI inflows was triggered by a major decline in FDI inflows in developed economies. For example, existing data suggest that FDIs declined by about 69% in developed economies but by only 12% in developing economies. In value terms, about half of the $859 billion in global direct investment inflows in 2020 came from investment flows to developing Asia, which totaled $476 billion in 2020 and constituted a 4% decrease from 2019

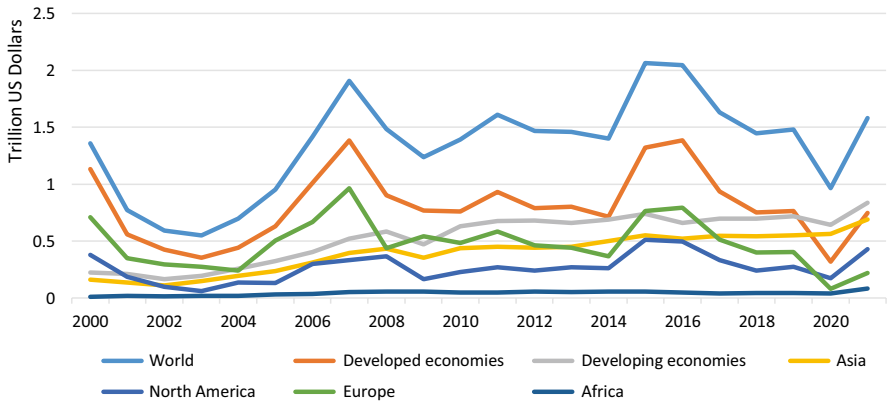


**Fig. 21.2** Annual foreign direct investment inflows by major country groups (inflows in trillions of dollars). (Source: United Nations Conference on Trade and Development. https://unctadstat.unctad.org/EN/BulkDownload.html. Created by authors)

(United Nations Conference on Trade and Development, 2021). However, investment inflows increased sharply after 2020. Indeed, there is evidence (Nawo & Njangang, 2022) that points to the fact that countries with sovereign wealth funds (SWFs) have been relatively more resilient to the detrimental impact of the pandemic on FDI. This may be explained by the fact that SWFs can serve as buffers and therefore infuse financial stability and help maintain investor confidence during tumultuous times, such as a pandemic. Besides the issue of SWFs, it is believed that FDI recovery from the effect of the pandemic has also been driven by targeted government actions such as (1) strategic shifts in policy responses and (2) gradual adaptations to the new normal induced by the pandemic (Duan et al., 2020; Tubić-Ćurčić, 2022).

## 21.5 The Long-Term Impact of the COVID-19 Pandemic on Trade

The implications of the pandemic transcended geographical boundaries and economic sectors, thereby leading to a great shift in the flow of global trade. Most importantly, this has brought to light the interconnectedness of the world's economies and the weaknesses embedded within them. From the existing evidence (Saif et al., 2021), there appears to be a strong correlation between the impacts of the pandemic and shifts in trade patterns. However, the nature of this correlation is complex, given that it is mostly driven by country and industry differences, as well as policy responses. On the one hand, the disruption in trade and economic activities caused by the pandemic has been considerable and widespread. The literature suggests that the COVID-19 pandemic had a negative impact on international trade (De Lucio et al., 2020; Büchel et al., 2020; Hayakawa & Kohei, 2021; Verschuur et al., 2021), noting that the decline in trade has been largely contingent on a multitude of factors. This includes the intensity of COVID-19 cases in importing countries, the severity of government response measures in exporting countries, and the specific industry concerned.

More importantly, the pandemic's influence on global trade is not entirely bleak. Monetary and fiscal policies, according to the WTO (2021), have played a significant role in increasing trade in regions such as North America, Europe, and Asia. These policies have boosted personal incomes in advanced economies, thereby supporting higher levels of consumption and consequently stimulating international trade (UNCTAD, 2022).

The crisis emanating from the pandemic accelerated the adoption of digital technologies, reshaped global trade patterns, and contributed to economic recovery in the long run (Hu et al., 2022; Fang et al., 2022). Yu et al. (2021) examined the long-term trade impact of epidemic outbreaks and found that the recovery pattern is mostly V-shaped, suggesting a sharp decline in trade, followed by a rapid recovery. The long-term consequences of the pandemic for global trade will depend on the speed of economic recovery, the extent to

which countries can adapt to new trade patterns, and the pursuit of trade-facilitating policies (Liu et al., 2021; Khorana et al., 2022). Based on the above, we provide below predictions of the impact of the COVID-19 pandemic on trade. The World Trade Organization (WTO) predicted that COVID-19 would lead to a decline in global trade volumes by 5.3% in 2020, which is less than half of the 9.2% decline it had predicted in its October 2020 projection update. According to WTO figures, worldwide merchandise export and import volumes increased by 13% during the first half of 2021 compared to the same period in 2020 (WTO, 2021).

North America, Europe, and Asia recorded greater increases in trade, while other regions lagged behind (Fig. 21.3). However, the manufacturing and service sectors were heavily impacted in 2020, as manufacturing exports fell from $6.31 trillion in 2019 to $5.23 trillion in 2020 and services from 12.74 trillion to $12.14 trillion (Fig. 21.4). The WTO stated that trade recovery was based on significant monetary and fiscal policy moves by several nations since all major goods categories experienced year-on-year gains. The WTO specifically attributed fiscal measures that enhanced personal earnings in advanced economies, which in turn supported relatively greater levels of consumption and international commerce, to improved economic performance. However, the WTO warned that supply issues, particularly regarding semiconductor chips, could suppress trade recovery in the near future (IMF, 2020).

Additionally, global exports and imports decreased in the first quarter of 2020 by 7.8% and 6.8% respectively, in volume terms and by 10.6% and 8.6% respectively in value terms, reflecting the pandemic's effects on the world economy (Fig. 21.2). Global exports and imports fell by 11.6% and 11.1% in volume during the second quarter and by 13.4% and 14.1% respectively in value terms. According to the WTO, trade in fuels and mineral products dropped by 38%, while trade in agricultural products declined by 5%. Some trade sectors

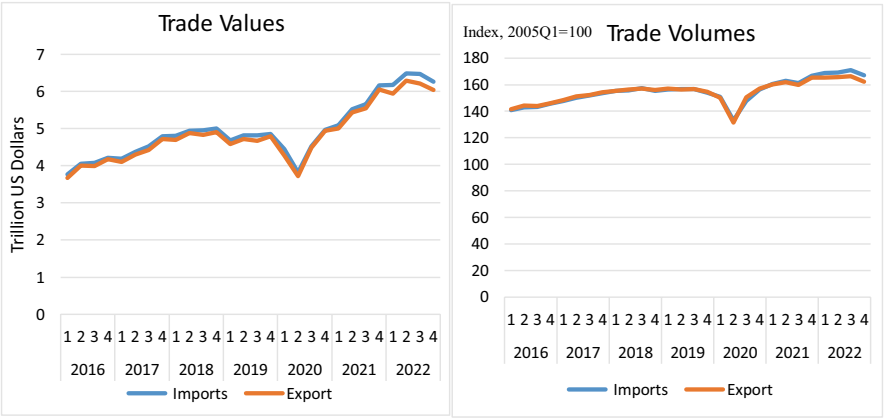


**Fig. 21.3** WTO estimates of quarterly global exports and imports volumes and values. (Source: https://stats.wto.org/. Created by authors)

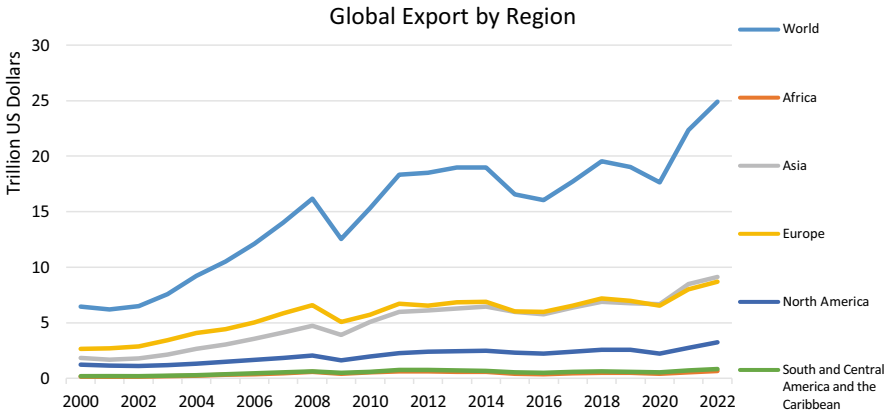


**Fig. 21.4** WTO Estimates of Global Exports by Region. (Source: World Trade Organization, 2023. https://stats.wto.org/. Created by authors)

were more negatively impacted than others. While export and import values soared by 20.7% and 18.3% in the third quarter, export and import volumes recovered and rose by 15.7% and 12.9% respectively. Global exports and imports rose by 6.1% and 7.2% respectively in volume terms and by 9.7% and 9.6% respectively in value terms in the fourth quarter of 2020. According to the WTO's March 2023 prediction, renewed economic lockdowns in response to a rise in COVID-19 cases in the fall of 2020 may have reduced global GDP growth by an additional 2 to 3 percentage points in 2021 and hampered international trade.

## 21.6 The Impacts of Previous Pandemics on Trade

The effect of pandemics and epidemics on trade has become an area of interest, given the substantial economic repercussions of such global health crises. This section provides crucial insights into the complex relationships between trade and previous pandemics such as H1N1, avian influenza (A/H1N1), SARS, and Ebola.

### *21.6.1 SARS Outbreak*

The COVID-19 pandemic was projected to have a more significant impact on industry than the SARS outbreak in 2003 due to its long incubation period, higher transmission rate, and strict controls over gathering and movement of people (Wei et al., 2021). This sub-section emphasizes the effects of previous pandemics, particularly the SARS outbreak, on trade. In addition, locations in which SARS was locally transmitted experienced a lower decline in trade. Studies in China, however, suggest that the SARS epidemic significantly hindered Chinese enterprises' exports (Guo & Chen, 2020).

Beside the above, there are a plethora of studies that discuss the relationship between SARS and trade. For instance, Bell et al. (2004) discussed the possible links between the animal origins of the SARS coronavirus and international trade of small carnivores, raising concerns about how trade can contribute to the spread of diseases. Lin et al. (2022) also explored how trade affects pandemics, providing insights into the relationship between trade and disease transmission. Kostova et al. (2020) analyzed US trade indicators and epidemics during the 2003 SARS outbreak and provided a comprehensive understanding of the relationship between trade and pandemics.

The SARS outbreak had a significant but temporary impact on exports, particularly in Asia and Europe. Asia's export values increased from approximately $1.81 trillion in 2002 to around $2.14 trillion in 2003, and then to roughly $2.65 trillion in 2004, indicating a significant recovery and growth post-SARS. Europe's export values increased from $2.86 trillion in 2002 to about $3.41 trillion in 2003, and then to approximately $4.09 trillion in 2004 (see Fig. 21.3). The resilience could be attributed to the nature of SARS, which, while severe, was relatively well contained and short-lived compared to later pandemics.

At the sectoral level, an increase in exports is observed across all sectors, but the rise was most significant in the pharmaceuticals sector, possibly due to the global response to the health crisis. Exports in pharmaceuticals surged from $0.17 trillion in 2002 to $0.2 trillion in 2003, a 22.91% increase, suggesting a heightened demand for pharmaceutical goods in the wake of the SARS outbreak (Fig. 21.4). Thus, the literature highlights the relationship between the 2003 SARS outbreak and trade, suggesting that pandemics can have both short-term and long-term impacts on trade.

### *21.6.2 Ebola Outbreak*

The economic impact of epidemics like the Ebola outbreak in West Africa in 2014 had far-reaching consequences that extended beyond the immediate health crisis. Travel restrictions and increased trade costs hindered both local and international trade, affecting economies on multiple levels (Evans et al., 2015; Adegun, 2014). This underscores the interconnectedness of global trade and the importance of understanding how such crises can reverberate throughout the world economy. The outbreak also had significant implications for specific industries. Akani et al. (2015) discussed the impact of the Ebola virus on the bushmeat trade in West Africa, illustrating how the epidemic disrupted local and regional markets.

The Ebola outbreak primarily affected West Africa. Though global export decreased massively from $19 trillion in 2014 to $16.6 trillion in 2015, Africa's export values slightly decreased from about $0.59 trillion in 2013 to around $0.56 trillion in 2014, before falling to approximately $0.40 trillion in 2015 (Fig. 21.5). However, the decline might not be entirely attributable to Ebola, as other concurrent global economic factors could have contributed to the

**Fig. 21.5** WTO estimates of global export by sector. (Source: https://stats.wto.org/. Created by Authors)

decrease. Concerning the sectoral analysis, the data does not indicate a significant drop in exports across the sectors. It's worth noting, though, that the Ebola outbreak was largely contained within West Africa. Thus, its global economic impact was limited compared to the SARS, A/H1N1, and COVID-19 pandemics.

### *21.6.3 Influenza Outbreaks*

The impact of influenza outbreaks on trade has been an area of significant interest, as evidenced by numerous studies (see Loff, 2010; Kimball, 2016; Hall, 2004; Djunaidi & Djunaidi, 2007; Rassy & Smith, 2013) exploring the economic consequences of various influenza pandemics. Existing evidence highlights the relationship between world trade, people with low incomes, and swine flu, and sheds light on ways in which global trade can exacerbate health disparities and leave vulnerable populations more susceptible to disease (Loff, 2010). This therefore suggests a bi-causal relationship between epidemics and trade. The bi-causal nature of the relationship between disease and trade is highlighted by the complex interdependencies between public health, trade policies, and economic systems, and therefore the need for a comprehensive understanding of the relationships to inform policymaking in a way that can be helpful in mitigating the negative impacts of influenza outbreaks and other pandemics on global trade.

At the general trade level, there is evidence to suggest that the advent of a pandemic such as the A/H1N1 influenza outbreak can trigger excessive trade measures, which indeed can be counter-productive to trade in general. At the sectoral level, there is evidence (Hall, 2004; Djunaidi & Djunaidi, 2007; Rassy & Smith, 2013) that suggests that the advent of epidemics/pandemics has had adverse an influence on sectoral exports and therefore trade. Existing studies

have, for example, pointed to the adverse effect of the H1N1 pandemic on Mexico's tourism and pork sectors, avian influenza (H5 and H7) on the poultry industry in the United States, avian influenza-related regulatory policies on poultry meat trade and welfare (Wieck et al., 2012), and avian influenza on world poultry trade and the US poultry industry (Djunaidi & Djunaidi, 2007). As a result of avian influenza, global export values dropped from around $16.17 trillion in 2008 to approximately $12.56 trillion in 2009. This drop is observed across all regions, indicating the worldwide reach of the A/H1N1 pandemic. The recovery was swift, however, with global export values bouncing back to around 15.30 trillion in 2010, demonstrating the global economy's resilience to this particular emerging pandemic (Horimoto & Kawaoka 2001).

Additionally, a fall in exports in all sectors was observed, reflecting the global impact of the pandemic. However, the pharmaceuticals sector was the least affected, with exports falling slightly from $0.42 trillion in 2008 to $0.44 trillion in 2009, indicating a continued strong demand for medical supplies and medicines during this period. The most affected sector was manufacturing, with exports falling from approximately $10.48 trillion in 2008 to around $8.38 trillion in 2009. The drop might be attributed to worldwide disruptions in manufacturing and supply chains due to the pandemic.

These prior studies illustrate the direct and indirect impacts of epidemics and pandemics on trade, both locally and internationally, and underscore the need for a comprehensive understanding of the economic consequences of disease outbreaks to inform effective policy and response strategies.

## 21.7 Conclusion

The COVID-19 pandemic has disrupted trade, supply chains, and demand patterns, with far-reaching and diverse effects on the global economy. Exporters, especially those in the agricultural industry, have encountered many difficulties; others have responded to the crisis with resilience and flexibility. Changes in trade policy, a greater focus on diversification and regionalization, and faster adoption of digital technologies to preserve competitiveness in a quickly changing environment are characteristics of the long-term effects of pandemics on trade. The pandemic has also had a substantial impact on global production and employment, resulting in job losses in a variety of industries, changes to organizational structures, and adverse effects on workers' mental health globally. These results highlight the value of focused policy actions to guarantee a more robust and equitable labor market in the post-pandemic era. Additionally, to successfully address the interrelated challenges occasioned by the pandemic and ensure a strong and long-lasting global economic recovery, international engagement and cooperation will be crucial.

Comparing the effects of COVID-19 to those of previous pandemics, such as the SARS outbreak in 2003, it is clear that COVID-19 has had a significant and long-lasting impact on trade and the world economy due to its unique nature, mode of transmission, and the unprecedented scope of policy responses.

Global value chains have been disrupted, creating a fall in foreign direct investment and unprecedented uncertainty. These issues underline how crucial it is for governments to implement regulations, make targeted interventions, and strategically deploy response measures (e.g., sovereign wealth funds) to mitigate negative consequences and create an environment that is more favorable to investment during crises.

It is critical going forward for all stakeholders, especially policymakers, to draw lessons from the COVID-19 pandemic experiences in various nations and industries. Understanding the intricate interactions between health crises and economic systems will be helpful in creating policies that promote economic recovery while enhancing our ability to withstand pandemics in the future. In order to ensure a more prosperous and secure future for all, this will require continuous research, data-driven decision-making, and a dedication to supporting innovation and sustainability in the global economy.

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CHAPTER 22

# E-Commerce and Digital Trade in Africa

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## 22.1 Introduction

It is obvious that e-commerce and digital trade have become catalysts for economic growth and transformation across the globe. In Africa, the rapid adoption of digital technologies and the increasing penetration of the Internet have paved the way for the emergence of a vibrant e-commerce ecosystem. Given the vast population, untapped markets, and a rising middle class, African economies hold tremendous potential for the expansion of e-commerce and the integration of digital trade across the region. The advent of e-commerce and digital trade has revolutionized the way goods and services are bought, sold, and delivered. It has transcended traditional physical barriers, allowing businesses to connect with customers and suppliers beyond geographical constraints. Africa, with its unique set of opportunities and challenges, is experiencing a digital revolution that is reshaping the trade landscape.

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_22

This chapter explores the landscape of e-commerce and digital trade in Africa, delving into the opportunities it presents, the challenges it faces, and the strategies required to leverage its full potential. From the growth of mobile technology to the transformation of digital platforms, we explore the various aspects of e-commerce and digital trade and their impact on Africa's economies and societies. By examining the trends, benefits, and challenges associated with e-commerce and digital trade in Africa, we can gain insights into the transformation of digital technologies and their role in driving economic development, promoting entrepreneurship, and fostering inclusive growth. Additionally, we explore the efforts being made by African governments, businesses, and international partners to address the challenges and unlock the opportunities presented by e-commerce and digital trade.

## 22.2 Evolution and Trends of Digital Trade in Africa

Information communication technologies (ICTs) have continued to spread since the 1985 World Telecommunication Development Conference in Arusha. The development of ICTs during the past 30 years has had a big impact on how products, services, and information are purchased, sold, and traded through fostering the growth of digital markets and platforms (Valinasab, 2021). Digital trade has its roots in the 1960s, when businesses began using an electronic system to speed up the transfer of documents. In the early 1990s, the first transaction, entailing the exchange of *digital* optical discs between friends using the online storefront NetMarket, was adopted (Sauvé & Soprana, 2020; Valinasab, 2021). Since then, the industry has experienced tremendous change, leading to significant evolution of digital trade. For instance, businesses like Alibaba, Amazon, eBay, and Etsy were compelled to move from traditional bricks-and-mortar merchants and adopt new technologies to survive (Trentini et al., 2022). In the digital age, where more goods and services are traded internationally, the traditional channels of trade facilitation have given way to cross-border trade between countries.

In recent years, it has become very easy to see how individuals and businesses are able to shop online and how the sales of goods and services are being facilitated by new technology. It is evident that customers are able to engage with businesses by downloading applications via smartphones and other devices and make transactions online. The advent of free delivery, which lowers prices for customers, has also contributed to the digital trade sector's rise in popularity. Digital trade provides the platform to combine offline products and services with digitally enabled business models. This offers businesses the opportunity to digitalize, operate, and deliver through the Internet (Smeets, 2021). Cross-border trade is increasingly becoming digital in character, a tendency that is likely to continue in the future.

In the recent evolution of ICT systems, digital trade has enjoyed exceptional growth momentum, as evident in the rise in Internet connectivity and the number of Internet users across the world between 1997 and 2022 (Statista,

2020; UNCTAD, 2021). This boom in global connectivity has been accompanied by the expansion of digital trade and e-commerce. Based on the 2022 data of the United Nations Conference on Trade and Development (UNCTAD), the value of digital services rose from around 1200 billion dollars in 2005 to almost 3811 billion dollars over the same period, representing an increase of 218%, and contributing almost 4.4% to the world's GDP.

The transformation of digitalization across the world has led to unprecedented declines in the costs of engaging in international trade, leading to a change in the levels of trade and contributing to the competitive global market (Lopez-Gonzalez & Ferencz, 2018; Lopez-Gonzalez & Jouanjean, 2017). The emergence of multinational companies, the facilitation of multinational value chains, and the creation of new tradeable goods and services are just a few of the ways that digitization has contributed to a changing trade environment in the world. In the world economy, everything in trade is now digital, from manufacturing to apparel, from agricultural to business services.

Africa presents a great opportunity to develop digital trade in the region. A key factor in innovative, inclusive, and sustainable growth is digital transformation. Innovations and digitalization are promoting job growth, tackling poverty, and reducing inequality, making it easier to trade products and services across economies, and advancing Africa's Agenda 2063 advancing the Sustainable Development Goals (see Peters, 2023; Igue et al., 2021; Foster & Azmeh, 2018). Although Africa is still developing in the digitalization of trade, the region has shown considerable improvements in the sector For instance, the estimated average number of Internet users in Africa was at 570 million in 2022, which is twice the average recorded in 2015 (World Bank, 2023; UNCTAD, 2021). Although revenues from digital services in Africa were relatively low compared to the world average, based on the 2022 data from UNCTAD, they have grown significantly since 2005, from $10 billion to almost $34 billion in 2022 (UNCTAD, 2021). The development of digital trade on a global scale in general, and in Africa in particular, relies on a number of catalytic factors, notably factors such as secure Internet connectivity and financial inclusion, but also the adoption of digital technologies as a whole by all segments of the economy (UNCTAD, 2021; Valinasab, 2021; Azmeh et al., 2020; WTO, 2018). These various factors have been evaluated and summarized by international organizations through country indices that enable us to compare the level of preparation and adoption by countries in terms of e-commerce development. These include the World Bank's Digital Adoption Index and UNCTAD's B2C E-commerce Readiness Index. Given the recent development in the digital trade sector in Africa, it is important to analyze the trends in the Digital Adoption Index and E-commerce Readiness Index in recent years, as discussed below.

### 22.2.1 *Digital Adoption Index*

In the 2016 World Development Report, the World Bank constructed an index for measuring a country's digital adoption, referred to as the Digital Adoption Index. The Digital Adoption Index is a composite index that captures the level of digital adoption in a country, by individuals, businesses, and the government. The index ranges between 0 and 1. Table 22.1 shows the top 10 countries by the Digital Adoption Index, based on the 2016–2022 world ranking. Table 22.1 shows that out of the 48 African countries, six countries scored above the overall index value (0.50), representing a proportion of 12.5%. The countries that recorded above the regional average include South Africa (0.64), Mauritius (0.62), Seychelles (0.6), Tunisia (0.56), Morocco (0.56), and Egypt (0.53). Given a global average value of 0.85, Africa is considered to exhibit relatively low digital adoption due to the technological challenges faced by most African countries that fall below the regional average.

### 22.2.2 *B2C E-commerce Readiness Index*

UNCTAD proposes a composite index to measure the readiness of economies to support and benefit from online commerce between businesses and their customers (B2C or Business to Consumer). The index is based on four main indicators that are highly correlated with online purchasing, namely, the rate of financial account ownership, the rate of Internet penetration, the postal reliability index, and the rate of reliable Internet servers (UNCTAD, 2021). The index ranges from 0 to 100, and it is estimated based on a simple average of the sub-indicators.

Figure 22.1 shows the overall E-commerce Readiness Index across different regions in the world based on the 2020 database of UNCTAD. In 2020, the

**Table 22.1** Top 10 African countries by Digital Adoption Index (DAI) (2016–2022)

| *Country* | *Digital Adoption Index* | *DAI Business Sub-index* | *DAI People Sub-index* | *DAI Government Sub-index* |
|---|---|---|---|---|
| South Africa | 0.64 | 0.69 | 0.50 | 0.73 |
| Mauritius | 0.62 | 0.63 | 0.57 | 0.65 |
| Seychelles | 0.60 | 0.68 | 0.58 | 0.53 |
| Tunisia | 0.56 | 0.61 | 0.46 | 0.60 |
| Morocco | 0.56 | 0.60 | 0.42 | 0.64 |
| Egypt | 0.53 | 0.49 | 0.38 | 0.71 |
| Botswana | 0.47 | 0.48 | 0.47 | 0.47 |
| Ghana | 0.45 | 0.42 | 0.39 | 0.55 |
| Cabo Verde | 0.43 | 0.49 | 0.43 | 0.38 |
| Mauritania | 0.34 | 0.38 | 0.24 | 0.39 |

Source: Authors, data from World Bank's World Development Report 2016–2022: Digital Dividends

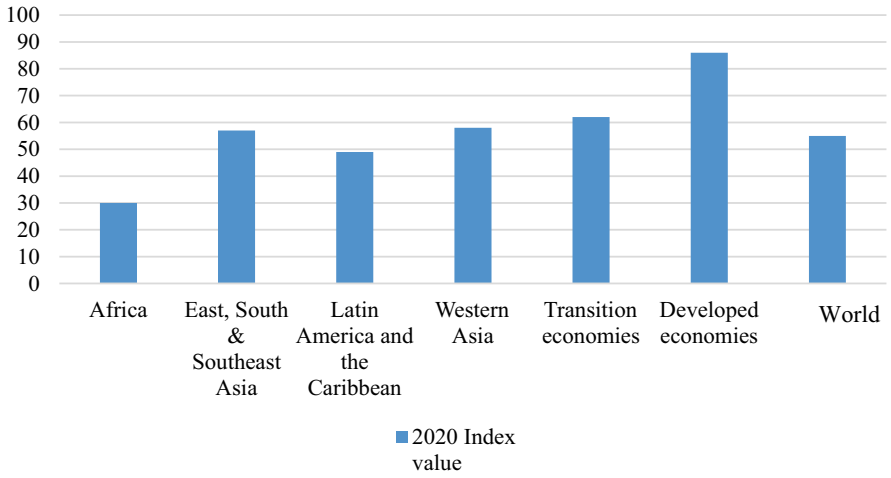


**Fig. 22.1** Regional values for the UNCTAD B2C E-commerce Index, 2020. (Source: Authors' construction based on data from UNCTAD, 2021)

**Table 22.2** Top 10 African countries by B2C E-commerce Readiness Index Value, 2020

| *Continental ranking* | *Global 2020 ranking* | *Economy* | *Index value (2020)* | *% change (2019–2020)* |
|---|---|---|---|---|
| 1 | 69 | Mauritius | 58.4 | -10.6 |
| 2 | 73 | South Africa | 56.5 | 0.1 |
| 3 | 77 | Tunisia | 54.6 | -1.4 |
| 4 | 80 | Algeria | 52.2 | 14 |
| 5 | 81 | Ghana | 51.9 | 12.7 |
| 6 | 85 | Libya | 49.7 | -1 |
| 7 | 88 | Kenya | 49 | 0 |
| 8 | 94 | Nigeria | 46.2 | -3 |
| 9 | 95 | Morocco | 44.8 | 1.3 |
| 10 | 99 | Senegal | 44.1 | 1.1 |

Source: Authors, data from UNCTAD, 2021

African region had the lowest average index value (30) compared to the rest of the world (55) (see Fig. 22.1). The low value of the overall index is attributed to the low postal reliability score (21) in the year 2022, which was one of the lowest in the world. However, the overall index has increased tremendously in recent years due to the increase in the rate of financial inclusion of about 40% on average.

Table 22.2 shows the top 10 African countries ranking of the E-commerce Readiness Index, based on the 2019–2020 world ranking. Five countries out of 44 are above the regional average (50) in terms of the overall index. These

include Mauritius (58.4), South Africa (56.5), Tunisia (54.6), Algeria (52.2), and Ghana (51.9).

It can be seen that countries that recorded a relatively low E-commerce Readiness Index compared to the overall average, in the period 2019–2020, were severely hit by the impact of the COVID-19 pandemic (OECD, 2020). However, some countries in Africa benefited from the restricted movement policies that encouraged the growth of digital payment systems and other online services. This was the case for Ghana, which saw an increase in its score (Readiness Index) between 2019 and 2020, with a positive variation of +12.7%, while Mauritius recorded a significant drop in its index (-10.6%). Overall, the African continent's lag behind most regions of the world has an impact on the current dynamics of digital trade on the continent, and the associated revenues generated.

### *22.2.3 Online Payments Across Africa*

In most regions of the world, online payment systems show an upward trajectory due to the population growth among people aged 15 years and above. However, despite the positive trends in e-transactions and online payments in other regions such as North Africa, the Middle East, and low- and middle-income countries, the dynamics of e-transactions in sub-Saharan Africa remain very sluggish compared to those regions (see Fig. 22.2).

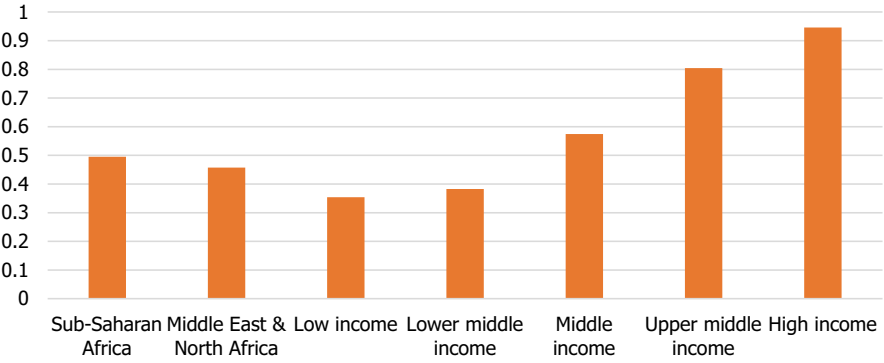


**Fig. 22.2** Trends in digital payments across regions (% age 15+), 2017–2021. (Country-level analysis reveals heterogeneity of e-payments penetration among African countries. Figure 22.3 shows the ranking of top 10 countries in Africa which have experienced higher levels of digital payments over the 2017–2021 period. These countries recorded above the regional average, with South Africa recording the highest average digital payment index for the period, 2017–2021, while Tanzania recorded the lowest score over the same period)

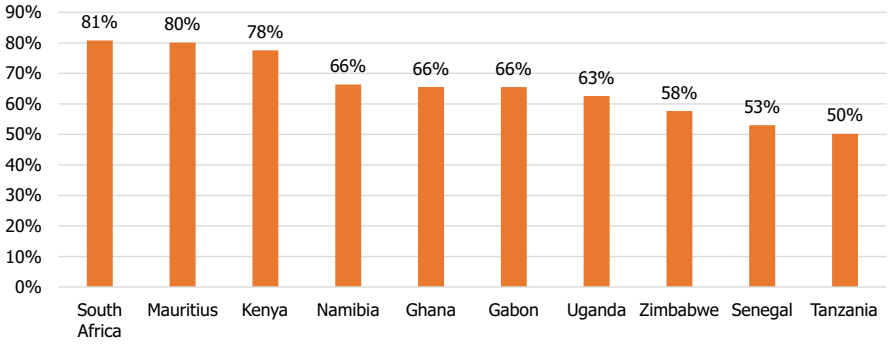


**Fig. 22.3** Digital payments across African countries (% age 15+), 2017–2021. (Source: Authors' computation, based on the Global Findex Database, 2022)

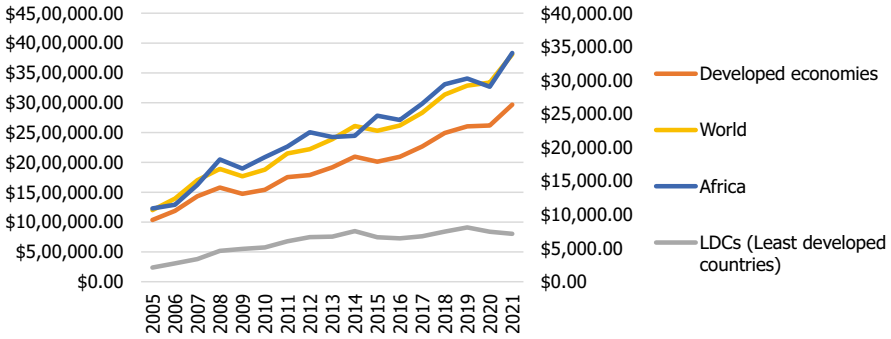


**Fig. 22.4** Digitally deliverable services exports value across regions. (Note: (US dollars at current prices in millions). Source: Authors' computation, based on the World Development Indicators of the World Bank, 2022)

### *22.2.4 International Trade in Digitally Deliverable Services, Value, and Shares*

Recently, exports services that adopted the use of digital technologies have grown rapidly globally (UNCTAD, 2021). The trend in Africa's trade, based on the UNCTAD database, highlights that the value of exports of digital services tripled globally, from nearly USD 1200 billion in 2005 to USD 3811 billion in 2021, indicating an overall increase of 218%. Over the same period, the African region has shown a similar trend. Indeed, the value of exports of digital services from Africa to the rest of the world rose from USD 10.9 billion in 2005 to USD 34.1 billion in 2021, representing an overall increase of 213%. Figure 22.4 shows that the African region occupies a relatively high position, in terms of the average digital export services, compared to the other regions in the world.

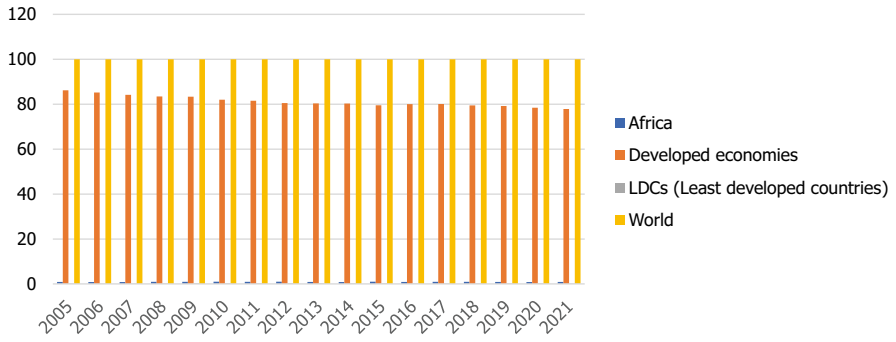


**Fig. 22.5** Percentage of total worldwide digitally deliverable services (export) by region. (Source: Authors' computation, based on the World Development Indicators of the World Bank, 2022)

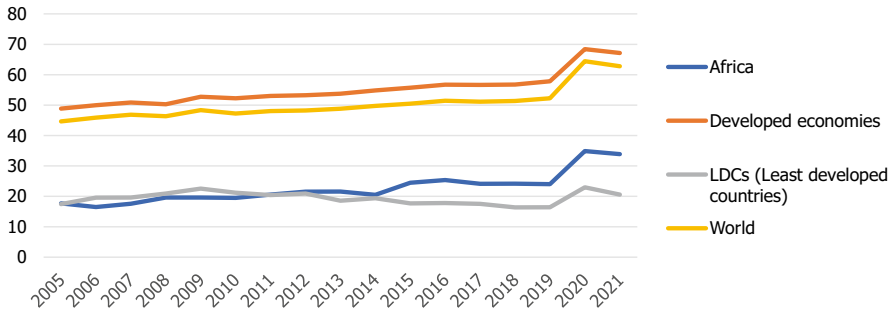


**Fig. 22.6** Percentage of worldwide digitally deliverable services exports in the services sector. (Source: Authors' computation, based on the World Development Indicators of the World Bank, 2022)

Figure 22.5 shows the share of exports of digital services by region. We see that Africa lies below her counterparts in the world, even though the region shows variations across the period, 2005–2022 (see Fig. 22.5).

Figure 22.6 shows that the African region has a relatively lower average of digitally deliverable services exports in the services sector over the period, compared to the averages of the world and of the developed economies. However, countries in Africa, on average, have relatively high average digitally deliverable services exports in the services sector over the same period, compared to other least developing countries.

Figure 22.7 shows the trends in the average digitally deliverable services exports to GDP of Africa and the world over the period 2005–2022. The expansion of digital services in the different regions of the world has contributed to the growth of the economy. Based on the data for the period between 2005 and 2021, the share of digital services in global GDP doubled from 2.1% to 4.3%, respectively, leading to an increase of 2.2 percentage points (see

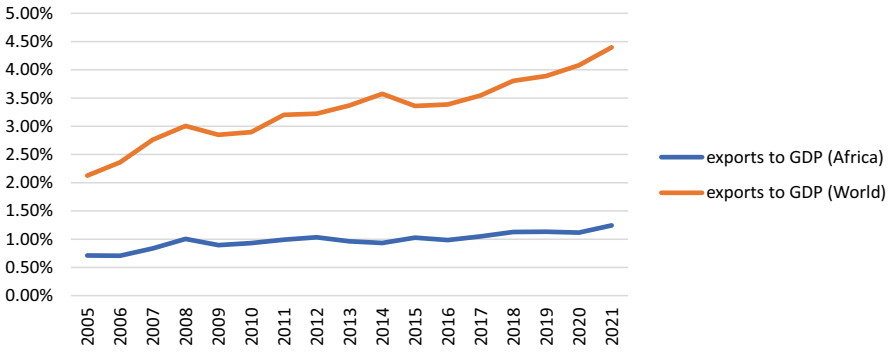


**Fig. 22.7** Digitally deliverable services exports to GDP (2005–2022). (Source: Authors' computation, based on the World Development Indicators of the World Bank, 2022)

Fig. 22.7). However, the share of exports of digital services in GDP in Africa remained relatively low compared to the world average, over the same period. Thus, Africa benefits little from digital services.

## 22.3 Contemporary Issues in Digital Technology in Africa

Digital technology has revolutionized the world by transforming the way we communicate, work, learn, and access information. It encompasses various technological advancements such as computers, the Internet, mobile devices, artificial intelligence, and cloud computing, among others. This interconnected ecosystem has had a profound impact on societies across the globe, enabling unprecedented connectivity and unlocking new possibilities. Africa has experienced a significant digital revolution in recent years, with the widespread adoption of mobile technology acting as a catalyst for change. Mobile devices have become prevalent, even in remote areas, providing access to information, services, and opportunities that were previously out of reach. Digital technology is rapidly transforming various sectors across Africa, leading to both opportunities and challenges (see Peters, 2023; Igue et al., 2021; Foster & Azmeh, 2018).

One notable aspect of digital technology's impact on Africa is in the realm of communication. Mobile phones have bridged the communication gap, allowing individuals to connect with one another, irrespective of geographical distance. This has fostered social cohesion, empowered communities, and facilitated the exchange of ideas and knowledge. Moreover, the Internet has opened doors to a wealth of information and online services, creating opportunities for education, entrepreneurship, and e-commerce. Digital platforms have provided African entrepreneurs with access to global markets, enabling them to showcase their products and services on a much larger scale and raise capital

through the various digital platforms that digital technology has created. This has contributed to economic growth, job creation, and the emergence of a vibrant startup ecosystem across the continent (Opoku-Afari et al., 2022).

Digital technology has also played a crucial role in sectors such as healthcare, education and agriculture in Africa. Mobile health initiatives have improved access to healthcare services, especially in remote areas with limited infrastructure. The use of drones, for instance, to deliver essential medical products to remote areas in Ghana is helping to save millions of lives and costs of medical care. E-learning platforms and online educational resources have expanded access to quality education, particularly in remote and underserved areas. Initiatives such as eLimu in Kenya and eLearning Africa have leveraged digital tools to enhance learning outcomes and bridge educational gaps. Farmers are leveraging digital tools to gain access to weather information, market prices, and agricultural best practices, empowering them to make informed decisions and enhance productivity. For instance, Farmcrowdy in Nigeria is a digital platform that connects investors with smallholder farmers. Through the platform, farmers receive funding, training, and market access, while investors can track the progress of their investments digitally.

While digital technology adoption is increasing in Africa, a significant digital divide exists, with disparities in Internet access and connectivity between urban and rural areas, as well as across different countries. Limited infrastructure, high data costs, and low levels of digital literacy hinder widespread access to digital technologies, excluding many individuals and communities from the benefits of the digital revolution. Opoku-Afari et al. (2022) argue that technological innovations exclusively hinge on infrastructure that is resilient, compatible, and secure. They contend that digital technology depends heavily on digital infrastructure such as Internet connectivity, satellite aerospace signaling, and electricity. The expansion of reliable Internet connectivity and infrastructure remains a critical challenge in Africa. Building and maintaining a robust telecommunications infrastructure is essential to support digital technologies, including broadband networks, mobile connectivity, and data centers. Improving connectivity in underserved areas is crucial to bridge the digital divide and promote inclusive development (Lukonga, 2018). Rural areas and remote communities often lack reliable Internet infrastructure, hindering their ability to fully leverage digital technologies. Affordability of Internet services and devices is another concern, as the cost of connectivity remains high for many Africans. However, due to sustainable financing shortfalls, the continent of Africa still lacks the critical infrastructure that supports Internet connectivity and access to digital services (Opoku-Afari et al., 2022). This shortfall has been exacerbated by the huge capital requirements occasioned by the landlocked nature of most African countries. Efforts are underway to bridge this divide through initiatives focused on improving connectivity, digital skills training, and policy frameworks that promote inclusive digital development.

There is a growing need for digital skills and education across Africa to fully harness the opportunities that come with digital technology (Opoku-Afari

et al., 2022). Equipping individuals with the necessary knowledge and skills to effectively utilize digital technologies is vital for economic empowerment and participation in the digital economy. Meltzer (2015) argues that nearly half of Africa's population does not use Internet-supported telephone devices and half of those who do are not digitally skilled and proficient. This affects their ability to fully utilize the potentials of the digital world that require the use of Internet. Efforts are needed to enhance digital literacy, provide training programs, and incorporate digital skills into educational curricula to prepare the workforce for the digital era.

The increased demand for digital technology and its applications to areas such as the financial sector, amid inadequate infrastructure, low Internet connectivity and security, and poor regulatory frameworks, exposes the region to cyber risks and threats (Lukonga, 2018; Opoku-Afari et al., 2022). With increased digital connectivity comes the risk of cybersecurity threats and data breaches. Protecting digital infrastructure, securing personal data, and strengthening cybersecurity frameworks are critical challenges in Africa. Building robust legal and regulatory frameworks, investing in cybersecurity measures, and raising awareness about online safety are essential to mitigate risks and safeguard digital ecosystems.

E-commerce and digital payments are gaining momentum across Africa, offering new opportunities for businesses and consumers. However, challenges such as limited access to financial services, trust issues, and inadequate payment infrastructure hinder the growth of digital trade. Addressing these challenges through innovative financial solutions, expanding digital payment systems, and building consumer trust is crucial for unlocking the potential of e-commerce (Lukonga, 2018). Closely related to e-commerce and digital payments is an enabled thriving ecosystem of startups and digital entrepreneurs in Africa. However, issues such as access to funding, regulatory barriers, and limited market opportunities can hinder the growth and scalability of digital startups. Creating supportive environments for entrepreneurship, fostering innovation ecosystems, and promoting policies that facilitate startup growth are essential for nurturing digital entrepreneurship in Africa.

Developing effective digital governance frameworks and policies is a critical contemporary issue in Africa. Policymakers need to address issues related to data privacy, digital rights, intellectual property, and cross-border data flows. Striking a balance between promoting innovation and protecting users' rights while ensuring fair competition is essential for sustainable digital development. Ensuring digital inclusion and leveraging digital technologies for social impact are important considerations. Efforts should be made to bridge the gender digital divide, empower marginalized communities, and harness digital technologies for social development, healthcare, education, and agriculture. Promoting digital inclusion and using technology as a tool for social transformation can contribute to reducing inequality and enhancing overall well-being. These contemporary issues highlight the challenges and opportunities associated with digital technology in Africa. Addressing these challenges requires

collaborative efforts from governments, private sector entities, civil society, and international organizations to create an enabling environment, promote digital skills, improve infrastructure, enhance cybersecurity measures, and leverage digital technologies for inclusive and sustainable development.

## 22.4 Globalization of E-commerce

The internalization of e-commerce has emerged as a transformative phenomenon. The rapid advancement of digital technologies, the ubiquity of the Internet, and the rise of e-commerce have paved the way for businesses to expand beyond their local markets and establish a global presence. In the age of digitalization and interconnectedness, e-commerce has become a significant driver of globalization and global trade. The Internet has revolutionized the way businesses operate, enabling companies of all sizes to expand their reach beyond borders and tap into global markets. The internalization of e-commerce has enormous implications for international trade, flow of funds, and global security, as well as associated opportunities and challenges (see Li & Zhang, 2022; OECD, 2020; WTO, 2018; Lopez-Gonzalez & Jouanjean, 2017).

The Internet has effectively dissolved geographical boundaries, providing e-commerce with unparalleled access to a global customer base. Traditional limitations associated with physical stores and distribution networks are transcended, enabling companies to offer their products and services to consumers worldwide. By capitalizing on e-commerce platforms, e-commerce can reach customers in diverse regions, leading to increased revenue streams and growth potential. The rise of e-commerce giants such as Amazon, Alibaba, and Flipkart exemplifies the globalization of e-commerce. These companies have successfully expanded their operations beyond their home markets to become global players. For instance, Alibaba, the Chinese e-commerce behemoth, has not only dominated the domestic market but has also expanded its reach to international markets through platforms like AliExpress, connecting buyers and sellers worldwide. Online marketplaces like eBay, Etsy, and MercadoLibre have created platforms where buyers and sellers from different countries can interact and conduct business seamlessly. These marketplaces enable small businesses and entrepreneurs to access a global customer base. For example, Etsy, a global marketplace for handmade and vintage products, allows artisans and craftspeople from various countries to sell their products to customers around the world.

The rise of remote work and freelancing platforms has facilitated the globalization of services. Platforms such as Upwork, Fiverr, and Toptal connect skilled professionals with clients worldwide. Businesses can now hire talent from different countries and collaborate remotely, transcending geographical limitations. This globalization of services has transformed industries such as software development, graphic design, content writing, and digital marketing. The entertainment industry has witnessed the globalization of e-commerce through digital streaming services like Netflix and Spotify. These platforms

have expanded their operations internationally, providing on-demand access to movies, TV shows, and music to subscribers worldwide. Netflix, in particular, has made significant strides in creating localized content for different markets, adapting to local preferences and languages, thereby embracing cultural diversity. Further, globalization of e-commerce is evident in the field of education. E-learning platforms like Coursera, Udemy, and Khan Academy have made quality education accessible to learners across the globe. Students can enroll in courses offered by prestigious universities and institutions from different countries, transcending physical boundaries. For instance, Coursera partners with universities worldwide, offering courses in multiple languages and catering to diverse learning needs.

Importantly, e-commerce companies often enjoy lower overhead costs. They can operate with minimal physical infrastructure, reducing the financial burden and risks typically associated with establishing a presence in foreign markets. Digital marketing strategies enable precise targeting, allowing businesses to identify and engage with specific international markets without the need for costly physical storefronts. Advancements in logistics and shipping services have significantly streamlined the process of international product delivery. E-commerce can leverage reliable and efficient shipping networks to reach customers across borders, ensuring timely and cost-effective order fulfillment. Moreover, the development of secure payment gateways and robust online security measures has fostered trust and facilitated cross-border transactions, eliminating barriers to international trade.

One of the critical aspects of internationalizing e-commerce is the ability to adapt to diverse cultural contexts and satisfy consumer choices. Localization strategies play a pivotal role in tailoring the customer experience to specific markets. This involves translating content, adapting marketing messages, and customizing product offerings to align with local preferences and cultural nuances. By demonstrating an understanding of and respect for the target market, e-commerce can build trust, foster customer loyalty, and achieve sustainable growth. E-commerce companies possess a wealth of data on consumer behavior, preferences, and market trends. By harnessing the power of data analytics, businesses can gain valuable insights into potential markets, consumer needs, and competitive landscapes in different regions. This data-driven approach enhances decision-making, enabling businesses to optimize marketing strategies, identify untapped opportunities, and refine product offerings for international markets.

While the internationalization of e-commerce offers immense potential, it also presents several challenges that need to be addressed. Key among them is the issue of regulatory compliance. Operating in multiple countries requires navigating complex regulatory frameworks, tax systems, and legal requirements. E-commerce must invest in comprehensive legal and compliance strategies to ensure adherence to local laws, protecting both their reputation and customer trust.

Despite the global penetration and usage of the Internet, disparities in Internet infrastructure and connectivity persist across regions. E-commerce needs to ensure robust and reliable connectivity to deliver a seamless user experience globally. Closely linked to this is the issue of adapting to local languages, cultural norms, and preferences, which demand significant effort. E-commerce must invest in localization strategies that go beyond translation, encompassing tailored marketing campaigns, customer support in multiple languages, and localized user experiences.

Expanding into international markets exposes businesses to intensified competition from both local and global players. It is essential to conduct thorough market research, identify unique value propositions, and differentiate offerings to stand out in crowded marketplaces. This, however, comes with a huge cost, making it almost impossible for startups to compete fairly. Building trust with customers in foreign markets can be challenging. E-commerce must prioritize cybersecurity, data protection, and privacy measures to reassure customers that their sensitive information is protected. As technology continues to advance and connectivity improves, the globalization of e-commerce will likely accelerate further, unlocking new possibilities and reshaping industries across the globe. Embracing this trend and leveraging the opportunities it presents will be crucial for businesses to thrive in the increasingly interconnected and digitalized global economy.

## 22.5 E-Commerce Platforms

The ecosystem of e-commerce platforms in Africa is highly varied and has evolved considerably in recent years. In 2019, the number of e-commerce platforms operating in Africa was estimated at 631 (Jansen van Rensburg et al., 2021; International Trade Centre, 2020; ITCAUAS, 2020). These platforms are mainly active in online shopping, freelancing, and e-hailing. African online platforms can be divided into seven categories: online shopping (only goods), freelance, online shopping (restaurants), rental, e-hailing, logistics/courier, and other (Statista, 2023).[1] Between 2018 and 2019, the African digital market was specially represented by online sales, freelance, e-hailing, and logistics. The major part of activities provided by those platforms was services (60%) and almost 30% for furniture and goods (UN, 2021; ITCAUAS, 2020). Among the platforms operating in Africa, Jumia is the most important regarding the number of monthly visits. In fact, the number of users of Jumia per month was estimated to be 32 million in 2020 (UN, 2021; ITCAUAS, 2020). The second place is Takealot and Souq with an aggregated estimate of 20 million visits per month in the same year. Jumia, Takealot, and Konga mainly operate in online shopping and generated about 157,000 users per month on average in 2019. Other platforms like Snupit and V-Connect were leading the freelance segment with 36,000 users per month in 2019. The e-hailing segment was dominated

[1] Africas-digital-platforms-trends-report.pdf (cenfri.org)

by Uber, Bolt, and GIGM, registering 18,000 users per month in the same year. In terms of geographical distribution, South Africa was the leader with 105 marketplaces, followed by Morocco with an estimated 102 places, and Tunisia with more than 92 places in 2020.[2] Moreover, the top 10 countries had more than 600 marketplaces in the continent. In terms of activity levels, among the top 10 countries leading e-commerce in Africa, South Africa was the one with the most visitors (more than 500 million) in 2020, followed by Egypt with more than 300 million and Nigeria with more than 200 million visitors (Statista, 2023). In particular, Nigeria and South Africa were responsible for 45% of online retail sales in 2020.

In 2022, according to Statista, in terms of market shares, Jumia was the leading platform working in Africa, with 13% of the total market shares, followed by Amazon with 7% of shares, then Apple, Takealot, and Makro with an equal share of 4%. The revenues generated by the platforms in Africa has grown since 2017 (with USD11.8 billion) and this growth is projected to continue in such a way that the revenues reach USD59.61 billion in 2027 (Statista, 2022).[3] The electronics sector is the one which provided the greatest part of those revenues over the considered years (2017 to 2027), followed by the sectors of fashion, toys, hobbies and DIY, beauty, health, and personal and household care. Importantly, all the sectors have also experienced a steady growth over the period, except for 2022 when the revenues of the fashion sector marginally declined leading to a relative decline in the global revenues.

## 22.6 Contributions of Digital Technologies and International Trade Development in Africa

The rapid adoption and development of digital technologies have brought significant changes to trade and economic development in Africa. As African countries embrace digital transformation, there are valuable lessons that can be learned from the experiences and developments in digital technologies and trade in the region. Lessons learned include the importance of digital inclusion, leveraging mobile technology, promoting digital payments, fostering collaboration, supporting small and medium-sized enterprises (SMEs), harmonizing trade policies, and demonstrating resilience and adaptability. By applying these lessons, countries can harness the transformative power of digital technologies and trade to drive economic development, promote inclusive growth, and enhance livelihoods.

### *22.6.1 Digital Inclusion Is Crucial*

Ensuring digital inclusion for all segments of society is vital for leveraging the benefits of digital technologies and trade. Efforts should be made to bridge the

[2] Africa: number of online marketplaces by country | Statista
[3] Africa: e-commerce revenue 2017-2027 | Statista

digital divide, improve Internet connectivity, and promote digital literacy, particularly in underserved and rural areas. By providing equal access to digital tools and skills, countries can empower individuals, businesses, and communities to participate fully in the digital economy. Digital inclusivity has been used as a tool by many countries across the globe and especially in Africa to solve many pertinent challenges including financial exclusion (Opoku-Afari et al., 2022).

### *22.6.2 Mobile Technology as a Driver*

Africa's unique mobile revolution has played a significant role in expanding digital technologies and trade. Lessons learned from Africa's mobile success demonstrate the potential for leapfrogging traditional infrastructure limitations. Mobile technologies can facilitate access to digital services, enable mobile payments, and provide platforms for e-commerce. Leveraging mobile technology and embracing innovative mobile-based solutions can drive digital inclusion and economic growth (Meltzer, 2015).

### *22.6.3 Importance of Digital Payments*

Digital payment systems are critical for facilitating e-commerce and digital trade. Africa's experience highlights the importance of promoting secure and convenient digital payment platforms, such as mobile money, to overcome the challenges of limited banking infrastructure and promote financial inclusion. Enabling seamless, reliable, and affordable digital payment solutions encourages participation in digital trade and expands economic opportunities.

### *22.6.4 Collaboration and Partnerships*

Successful digital technology and trade developments in Africa have often been driven by collaboration and partnerships between governments, private sector entities, international organizations, and civil society. These collaborations facilitate knowledge sharing, capacity building, and the creation of enabling environments for digital technologies and trade to flourish. Engaging stakeholders from various sectors fosters innovation, enhances regulatory frameworks, and addresses common challenges collectively (Wu, 2017).

### *22.6.5 Supporting SMEs and Entrepreneurship*

Small and medium-sized enterprises (SMEs) are the backbone of many African economies. Digital technologies and trade provide opportunities for SMEs to access markets, expand their reach, and enhance competitiveness. Lessons learned highlight the importance of targeted support, including access to digital skills training, financial resources, and e-commerce platforms, to empower SMEs and foster entrepreneurship. Providing an enabling environment for

SMEs to leverage digital technologies can drive economic growth and job creation.

#### *22.6.6 Harmonizing Trade Policies*

African countries are recognizing the importance of harmonizing trade policies and regulatory frameworks to facilitate cross-border digital trade. Lessons learned emphasize the need for regional integration initiatives, such as the African Continental Free Trade Area (AfCFTA), to align trade policies, streamline customs procedures, and create a single digital market. By reducing trade barriers, promoting interoperability, and simplifying cross-border transactions (Wu, 2017), African countries can unlock the full potential of digital technologies and trade.

#### *22.6.7 Resilience and Adaptability*

African countries have demonstrated resilience and adaptability in leveraging digital technologies for trade. They have embraced innovative solutions to overcome challenges, such as limited infrastructure and connectivity. The ability to adapt and innovate is crucial in navigating the evolving digital landscape, and African countries can continue to learn from their experiences and seek innovative approaches to address future challenges.

### 22.7 Challenges of E-commerce and Digital Trade in Africa

#### *22.7.1 Limited Internet Connectivity and Infrastructure*

Access to affordable and reliable Internet connectivity remains a major challenge in many parts of Africa. The digital divide between urban and rural areas, as well as across different countries, inhibits the widespread adoption of e-commerce. Insufficient physical infrastructure, such as inadequate broadband networks and power supply, further exacerbates the problem, hindering the seamless operation of e-commerce (Lukonga, 2018).

#### *22.7.2 Lack of Trust and Consumer Confidence*

Building trust and consumer confidence in online transactions is crucial for the growth of e-commerce. In Africa, concerns about online security, fraudulent activities, and unreliable delivery services are prevalent. Vasek and Moore (2015) argue that many potential customers are skeptical about sharing personal and financial information online, limiting the willingness to engage in e-commerce activities. Addressing these concerns through robust cybersecurity

measures, secure payment gateways, and transparent delivery systems is essential.

### *22.7.3 Inadequate Payment Systems and Financial Exclusion*

In many African countries, traditional banking services are not easily accessible to a significant portion of the population, particularly those in rural areas. This lack of financial inclusion poses challenges for e-commerce, as online transactions rely heavily on digital payment systems. Integrating alternative payment methods, such as mobile money platforms and innovative fintech solutions, can help bridge this gap and encourage wider participation in digital trade.

### *22.7.4 Cross-Border Trade Barriers*

Africa has a fragmented market with diverse regulatory frameworks, trade policies, and customs procedures across different countries. This fragmentation complicates cross-border e-commerce, making it challenging for businesses to expand beyond their home countries. Harmonizing trade regulations, simplifying customs procedures, and promoting regional integration initiatives (Wu, 2017), such as the African Continental Free Trade Area (AfCFTA), are essential to unlocking the full potential of e-commerce in Africa.

### *22.7.5 Last-Mile Delivery Challenges*

Efficient logistics and reliable last-mile delivery services are crucial for the success of e-commerce. However, in many parts of Africa, inadequate transportation infrastructure, address systems, and logistical networks pose significant challenges for timely and cost-effective delivery. Innovative solutions, such as leveraging local distribution networks, utilizing technology-driven delivery platforms, and public–private partnerships, can help overcome these challenges and improve last-mile delivery capabilities.

### *22.7.6 Inadequate Skills and Digital Literacy*

A significant portion of the African population lacks adequate digital skills and literacy. Limited awareness and understanding of e-commerce platforms, online marketplaces, and digital trade processes hinders the adoption and utilization of digital technologies. Promoting digital literacy initiatives, providing training programs, and enhancing educational curricula to incorporate digital skills are crucial steps toward empowering individuals and businesses to leverage e-commerce opportunities effectively.

### *22.7.7 Market Fragmentation and Scalability*

African markets are diverse and fragmented, with varying consumer preferences, languages, and cultural nuances. Adapting and localizing products, services, and marketing strategies to cater to different markets can be resource-intensive and challenging. Moreover, scaling up operations beyond local markets can be complex due to logistical constraints, regulatory differences, and competitive landscapes. Building scalable business models, embracing technology-driven market research, and fostering strategic partnerships can help overcome these challenges.

Despite these challenges, it is important to recognize that Africa presents immense opportunities for e-commerce and digital trade. Addressing these obstacles requires concerted efforts from governments, private sector players, international organizations, and stakeholders at various levels. By investing in infrastructure development, policy reforms, skills training, and cross-border collaborations, Africa can unlock its digital potential and pave the way for inclusive and sustainable economic growth.

## 22.8 Conclusion

Digital technology has the potential to revolutionize trade in Africa, opening up new opportunities for economic growth, job creation, and innovation. While there are significant challenges to overcome, including limited Internet connectivity, infrastructure gaps, regulatory complexities, and skills development, African countries are increasingly recognizing the transformative power of digital technology and actively working toward harnessing its benefits. By investing in digital infrastructure, expanding Internet connectivity, and promoting digital literacy, African nations can unlock the vast potential of e-commerce, digital trade, and the digital economy. Embracing digital platforms and technologies enables businesses to reach new markets, connect with global customers, and streamline trade processes. It also facilitates access to financial services, promotes financial inclusion, and enhances cross-border trade. Regional integration initiatives, such as the African Continental Free Trade Area (AfCFTA), provide a framework for harmonizing trade policies, reducing barriers, and facilitating digital trade across borders. Collaborative efforts among African countries, supported by public–private partnerships, can foster innovation, encourage entrepreneurship, and create an enabling environment for digital technology and trade to thrive.

Furthermore, digital technology can empower small and medium-sized enterprises (SMEs) by providing them with access to global markets, digital payment systems, and supply chain optimization tools. This, in turn, has the potential to drive trade, enhance competitiveness, uplift communities, generate employment opportunities, and drive inclusive economic growth and foster sustainable development. However, it is crucial to address the digital divide and ensure that the benefits of digital technology and trade reach all segments of

society. Efforts should be made to bridge the gap in Internet connectivity, improve digital literacy, and address the affordability of digital services, particularly in rural and underserved areas.

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CHAPTER 23

# Infrastructure, Connectivity and Trade in Africa

*Matthew Kofi Ocran*

## 23.1 Introduction

Sub-Saharan Africa's (SSA) US$2 trillion economy is supported by a network of roads, railways, air and sea ports, waterways, electricity generation and distribution facilities and water waterways. The size of the economy has more than doubled from $831 billion (constant 2015 US$) in 2000 to $2 trillion in 2020. Future expansion will be supported by improved trade outcomes which will in part depend on the state of infrastructure. Thus far, Africa's contribution to global trade is limited. With 18% share of the world's population the continent accounts for less than 3% of global trade.

The poor state of infrastructure reduces productivity and elevates the cost of production, and also impairs the welfare of people on the continent. Infrastructure and connectivity are the backbone of a functioning economy. They stimulate employment creation, economic growth and development. The relationship between infrastructure investment, productivity growth and economic growth is well established in the literature (Aschauer, 1989; Bougheas et al., 1999; Day & Zou, 1994; Easterly, 1993; Gramlich, 1994; Holtz-Eakin & Schwartz, 1995; Lynde & Richmond, 1993; Nadiri & Mamuneas, 1994). Infrastructure investment in Africa between the 1990s and early 2000s accounted for 99 basis points in the increases in GDP per capita over the period. And this compares favourably with the 66 basis points attributed to improved structural policies. Calderon and Serven (2008) suggest that advances in penetration of telecommunication services accounted for almost the entire

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_23

impact of infrastructure investment on economic growth between 1990 and 2005. Africa's infrastructure in all the key areas lags the rest of the world. The poor electricity supply situation in many countries in Africa is the biggest threat to economic growth and job creation. Access to reliable electricity supply reduces the cost of doing business, stimulates economic growth and facilitates job creation.

The motivation for investment in infrastructure found in the economic literature is often associated with the view that such an expenditure could create jobs and provide multiplier effects in support of growth. But there is another aspect of infrastructure investment that is not much talked about. And that is the effect of infrastructure on trade outcomes (Han & Li, 2022). There is an increasing body of work that establishes a strong link between good transport, information technology and communication, water and electricity and positive trade outcomes.

In keeping with the theoretical and empirical view of the importance of good infrastructure and trade outcomes, the Asian Development Bank strongly advised South Asian countries to prioritise investments in infrastructure. Investment in infrastructure is needed to boost exports and reduce the region's persistent trade deficits, it is argued (Kurmanalieva, 2020). In Africa the need for increased infrastructure expenditure has also attracted attention from the leading regional bank, African Development Bank, and many national and continental bodies.

While the focus of the present chapter is on the relationship between infrastructure and trade, it is important to underscore the fact that trade is also an important determinant of economic development and transformation. Therefore, the quest for trade is a quest for economic development and transformation.

## 23.2 Theory and Evidence

The structuralist view in the economic literature suggests that infrastructure plays a critical role in ensuring market connectivity and facilitation of trade. On the contrary, absence of infrastructure hinders performance of markets and retards trade (Rehman et al., 2020). Yet though the main theories of trade do not explicitly cover the role of infrastructure in spurring trade. The closest that can be identified is the positive theory of international trade where transport cost is introduced to account for distinction between traded and non-traded commodities (Mundell, 1957; Samuelson, 1954). Consequently, Bougheas et al. (1999) argue that it is reasonable to assume transport costs depend on geographical factors and must be treated as exogenous. Bougheas and his collaborators further assert, "it is plausible to expect that they would depend inversely on the development of transport and communications infrastructure". The ability of countries, therefore, to compete in the international market depends on variations in transport costs to the markets. Flowing from

this, variations in the volume and quantity of infrastructure across countries would largely account for differences in transport costs and therefore competitiveness.

On the empirical front, however, there's considerable body of literature that suggests infrastructure has an important effect on trade. Many of these studies establish a positive relationship between various kinds of infrastructure and trade outcomes. Improved infrastructure does not only reduce the cost of internal trade but it also reduces multilateral trade costs, according to Donaubauer et al. (2018). The expansion of railway network in India from the nineteenth to the twentieth century had a notable impact on trade within India and with the rest of the world. The welfare of the Indian people also benefited considerably from the introduction of the railway network. According to Francois and Manchin (2013) good infrastructure brings down transaction costs associated with trade and in effect stimulates international trade, particularly for developing countries.

The effect of highways in lowering transaction costs, enhancing market access and increasing productivity is amply demonstrated in the literature. For example, Donaldson and Hornbeck (2016) provide evidence from the US, and Volpe Martincus et al. (2017) discuss findings of a study that shows a positive effect of lowering transaction cost on trade in Peru. In another study, Shepherd and Wilson (2009) provide evidence that transport infrastructure relating to sea ports and information and communication technology (ICT) has a direct positive impact on regional trade among Southeast Asian countries. Sea port efficiency, through better infrastructure, has been found to facilitate international trade significantly (Feenstra et al., 2015). Han and Li (2022) indicate better infrastructure leads to greater expansion of international trade flow more than international internal trade. On the contrary, studies have shown poor infrastructure impedes international trade using gravity models (Donaubauer et al., 2018; Yeaple & Golub, 2007). Infrastructure also has macroeconomic effects through its impact on trade. For instance, Rehman et al. (2020) argue improved infrastructure increases exports and reduces trade deficits.

Global value chains (GVCs), the new phase of international trade, thrive on the existence of efficient infrastructure to enhance connectivity. Connectivity is so critical in firm-to-firm relationships, the fulcrum around which GVCs thrive. Transportation and communication infrastructure improvements (i.e., connectivity) have expanded in tandem with country participation in GVCs. The work of Buchan et al. (2012) shows that connectivity facilitates trade and economic growth. Many studies provide evidence of a link between logistics performance and connectivity (see, for example, Hoekman & Nicita, 2008; Portugal-Perez & Wilson, 2008). In a report by the World Bank it was found that firms along highways are more likely to be major participants of GVCs with leading firms in Asia (World Bank, 2019). In conclusion we can see that infrastructure and connectivity are indeed necessary conditions for good trade performance.

## 23.3 Infrastructure Gap

This section reviews the state of infrastructure and gaps that need to be closed to facilitate domestic and international trade in Africa and to position the continent well to compete in attracting leader firms to support the continents participation in global value chains. In order to demonstrate the extent of the infrastructure gap we can consider access to basic services such as water and electricity. We look at the state of transport infrastructure—road, railway, air transport and sea ports. The section also reviews the state of communication and information technology development. On communication and telecommunication (ICT) we focus on mobile telephony, fixed telephones and Internet.

International trade has assumed a form where there is a high level of complex interactions between spatially distributed population, firms and related organisations. Supply chains span across countries, regions and continents. These are all an integral part of the new phase of trade, GVCs. Connectivity through all forms of transportation: roads, rail, air and sea, telecommunications, financial markets and information processing has become incredibly important. All these connectivity functions require infrastructure backbone of one form or the other. It stands to reason that for Africa and other developing regions to participate fully in trade, efforts must be made to provide the necessary infrastructure ecosystem to facilitate trade. The poor state of infrastructure in Africa, when they exist, and the low level of access have been the subject of many surveys. In this section we highlight some of the key infrastructure available on the continent and how various countries perform, regarding access and quality of service.

There are various estimates of the infrastructure gap, especially in low- and middle-income countries. For instance, the Asian Development estimates Asian-Pacific region needs an investment of US$26 trillion by 2030. The McKinsey Global Institute suggests an infrastructure investment of US$4.7 trillion is needed every year, with the OECD estimating the need at US$6 trillion (World Bank, 2019). The African Development Bank's estimates of Africa's infrastructure gap for electricity, water systems, rail and road are between US$68 billion and US$108 billion per year.

In the discussion of Africa's infrastructure gap, the African Development Bank argues the region's road access rate of 34% is far less than the 50% average of the developing world. It also indicates that transport cost is as much as twice the developing world's average. KPMG, the global consulting firm, estimates the average transport cost in Africa as 50% to 175% more than the figure in other parts of the world (Mitchell, 2021). Though these estimates of infrastructure gap vary from one institution to the other, there's no question that Africa has a huge gap between supply and demand of all forms of infrastructure.

### *23.3.1 Water*

Water supply and availability have both welfare and economic implications, and by extension impact on trade. Access to safe drinking water has direct impact on health outcomes. Water-borne diseases have been identified as some of the leading causes of infant mortality. On the economic front there is an impact on human capital outcomes. For example, lost work days and school absenteeism could result from increased disease burden due to water-borne diseases contracted from unsafe drinking water. To avoid disease outbreaks and to ensure that the population is in a healthy condition, the provision of portable water is imperative. Many enterprises, agriculture and non-agriculture also require a reliable supply of water in their production processes.

There is an acute shortage of the requisite infrastructure to provide water for a large of section of the continent's population. Even in instances where there is available supply there are often challenges with reliable supply. There is a paucity of data on water-related infrastructure in Africa. But the limited information and anecdotal evidence suggest considerable gaps in infrastructure for delivering water for household use, agriculture and non-agriculture businesses. Access to water averages 30% as compared to 70–90% in the developing world. While Africa is endowed with vast amount of water resources, a paltry 6% of agriculture is under irrigation against an average of 40% for the developing world. African Development Bank estimates lack of infrastructure reduces economic output by 2%, on the average (African Development Bank & African Union, n.d.).

The proportion of the population using drinking water from an improved source that is accessible on premises, available when needed and free from faecal and priority chemical contamination, is low in Africa. The figures for 2020 range from a high of 46% for Congo Republic, 41% in Ghana and 28% for Lesotho. For central Africa and Chad, the figure is 6% (World Bank, 2023). The improved water sources considered include piped water, borehole or tube well-protected dug wells, protected springs and packaged or delivered water.

Irrigation of land under agricultural cultivation is very limited in sub-Saharan Africa. Only 7% of the total area of 183 million hectares is under irrigation, according to the International Water Management Institute. The figure is by a wide margin the lowest proportion of irrigation in anywhere in the world.

### *23.3.2 Electricity*

Production of electricity in Africa is very low.[1] When production of electricity is measured in gigawatt-hours (GWh) generated per 100,000 people, the results are concerning. The average production for the continent is 73 GWh/100,000 people. Only ten countries out of the 54 countries on the

[1] The estimations are the author's based on data electricity production and mid-year population estimates for 54 African countries in 2020 as published in the African Statistical Year Book 2021.

continent generates more than 100 GWh/100,000 people. The top four electricity-producing countries in terms of GWh/100,000 are Libya 592 GWh; Seychelles, 524 GWh; South Africa, 469 GWh and Mauritius, 300 GWh. The five countries at the bottom of the electricity production league table are Chad with 1.9 GWh; Benin, 1.9 GWh; Burundi, 2.3 GWh; Niger, 2.4 GWh and Liberia, 2.7 GWh (UNECA et al., 2021).

Access to electricity is a challenge because most countries have low electricity generation capacity. Only a few countries are on track to achieve full access by 2030. These are Kenya, Ghana and Rwanda, according to estimates from the International Energy Agency (IEA) of the United Nations. When we consider the level of access on sub-regional basis, Eastern and Southern Africa sub-regions are behind other sub-regions. Access also varies widely between urban and rural areas, and between countries (Table 23.1). The gap between urban and rural areas is huge for Africa than other regions of the world. Across countries, Mauritius, South Africa and Ghana have access rates of 99.6, 89.3 and 86.3. On the other hand, the Southern African countries Zambia and Zimbabwe have access rates of 46.9% and 49% with Niger in West Africa having a rate of 19% (World Bank, 2023).

Thus, the disparity in access to electricity across the African continent is stark. Nonetheless, it is fair to say that electricity supply poses serious challenges even when there is access. Electricity access is plagued with issues of reliability of supply. The World Bank's Doing Business Survey 2020 suggest customers in 10 out of the 24 African countries that took part in a survey (42%) experienced outages averaging 24 hours over the period, May 2018 to May 2019. In 19 countries (79%), customers experienced at least two hours of outages. On the contrary, just 5% of customers in Europe experienced at least 24 hours of outages and for Asia the figure was 13%. Firms in Africa often flag electricity supply as the most important challenge they face in their operations. Electricity generation in Africa lags behind demand. In recent years many countries have experienced acute electricity shortage. This has resulted in instances of prolonged electricity blackout. Notably, South Africa, a country with the largest generation and transmission infrastructure, has been hit with unprecedented power outages lasting several hours in a day in recent years.

**Table 23.1** Access to electricity as a percentage of population, 2021

| *Country name* | *Urban* | *Rural* | *National* |
|---|---|---|---|
| Africa Western and Central | 86.6 | 25.8 | 54.2 |
| Africa Eastern and Southern | 75.6 | 44.4 | 48.1 |
| **Sub-Saharan Africa** | **80.7** | **30.4** | **50.6** |
| Middle East & North Africa (excluding high income) | 99.6 | 93.6 | 96.8 |
| Latin America & Caribbean | 99.5 | 96.5 | 98.3 |
| Europe & Central Asia | 99.9 | 99.7 | 100.0 |

Source: World Bank, World Development Indicators, 2023

Consumption levels are also low. Africa has the world's lowest per capita consumption of electricity at 514 kilowatt-hours. In Latin America consumption per capita is 1961 kilowatt-hours, while in China and Brazil the figures are 2944 kilowatt-hours and 2381 kilowatt-hours (Lakmeeharan et al., 2020). More than half of Africa's population have no access to electricity. Thirteen of the 20 countries with the least access to electricity in the world are in Africa, according to the African Development Bank. Among the 13 countries are some of the largest economies in Africa such as Nigeria, Angola, Kenya, Ethiopia, Tanzania and DR Congo among others. According to projections by McKinsey Consultants, given the current trends, full access to electricity may be attained in 2080. Some estimates suggest an investment of $43–55 bn/year to bridge the gap between demand and supply, and to guarantee universal access. The current rate of investment of $8–9.2 bn leaves a huge financing gap of over $35 bn/year. Electricity shortage is certainly a major constraint to the performance of African firms and this has dire consequences for trade.

### *23.3.3 Transportation*

Even though there is a paucity of up-to-date data on transport infrastructure in Africa, there are adequate indicative data to assess the state of transport infrastructure. Transport infrastructure is particularly in short supply. A greater part of the infrastructure is also not in great state.

*Road*

Road transport is the most important mode of transportation in Africa. Road transport carries 80% of freight and 90% of all passengers (African Development Bank & African Union, n.d.). However, investment in road infrastructure has not matched the demand. This has led to a situation where countries have large stretches of unmotorable roads during the raining season.

Cost of bad roads in Africa is immense. It impedes both internal and external trade. The World Bank estimates that there is an average of 204 km of roads per 1000 $km^2$ of land area on the continent. The road density is far lower than the global average of 944 km per 1000 $km^2$ of land area. But more importantly, more than 50% of the road network is not paved. The percentage of paved roads varies from 37% in South Africa, 35% in Zambia to less than 5% in Chad and Uganda (Fig. 23.1). On the ratio of roads in bad condition, the figure is 70% for Uganda. In Ghana, Malawi and Burkina Faso the ratio is less than 20% (Fig. 23.2). Again, it is estimated just one out of three people in rural Africa live within a distance of 2 km from an all-season road. This suggests a huge gap between rural and urban areas regarding access to all-weather road network.

Poor state of roads make it difficult for populations to access economic and social services such as education and healthcare. The proportion of the road network that is in bad condition is high in many African countries (see Fig. 23.2). While the data on road infrastructure are limited, the available data suggest that a considerable proportion of the road network is in a bad

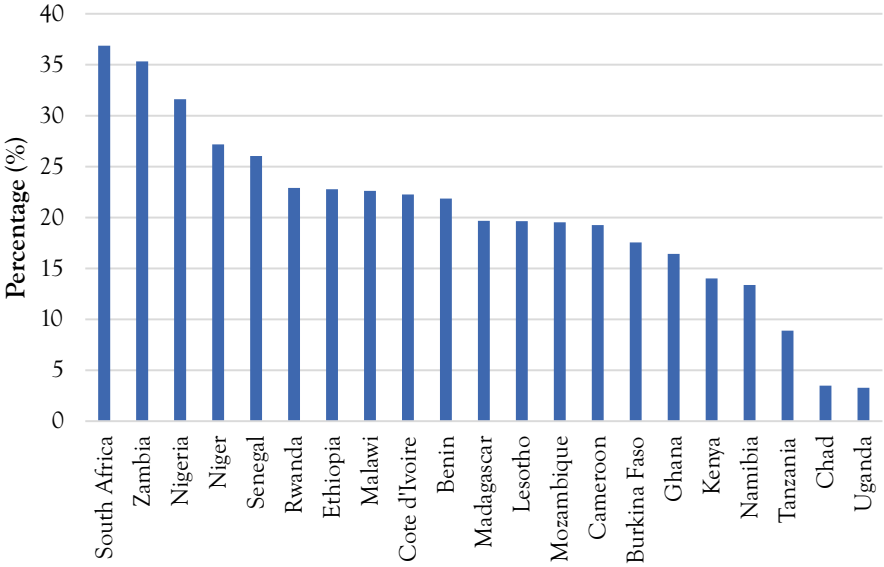


**Fig. 23.1** Paved roads in selected African countries, 2008 (%). (Source: World Bank (2023))

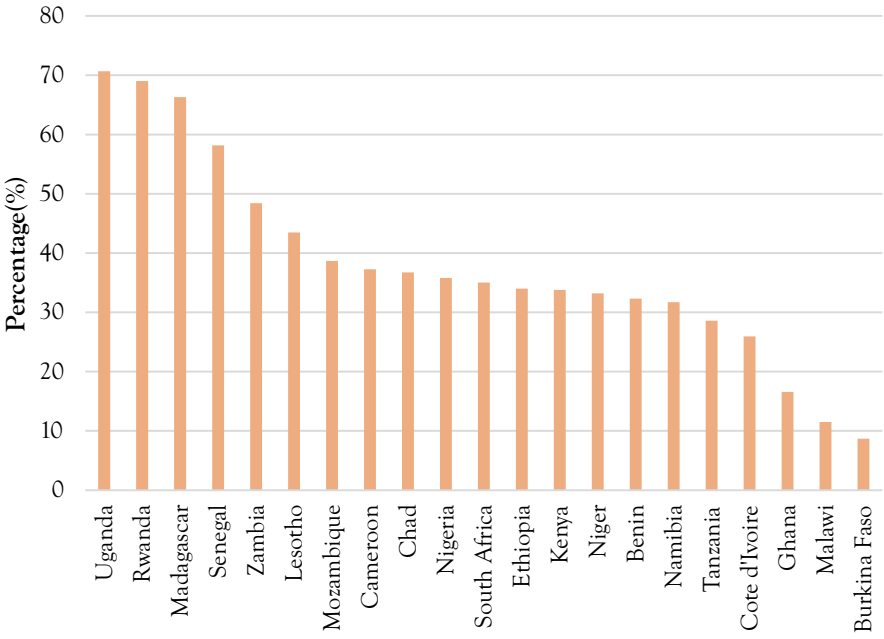


**Fig. 23.2** Ratio of roads in bad condition, 2008 (%). (Source: World Bank (2023))

condition. This finding is consistent with the data that suggest that many of the roads are not paved, that is, they are not all-weather roads. There are many anecdotal evidence that describes the horrible state of roads across Africa but even the limited and dated official data suggest a poor state of road infrastructure across the region.

The road infrastructure deficit requires 60,000 to 100,000 km new roads for a reasonable level of intracontinental[2] connectivity (Infrastructure Monitor, 2021). The poor level of infrastructure makes the cost of transport prohibitive. In one estimate, KPMG, the global consulting firm, argues that the cost of transportation in Africa is on the average 50 to 175% above the cost in other parts of the world. The challenges associated with road infrastructure raise the cost of transportation and make the continent less competitive in trade.

Interestingly, while road density—kilometre of road per square kilometre of land area (median)—increased in many regions of the world between 1990 and 2011, SSA's road density fell from 0.11 to 0.09. SSA is the only region that recorded a negative trend. South Asia increased its road density from 0.31 to 0.48. In the MENA region, it went up from 0.11 to 0.14. East Asia and Pacific region increased its road density threefold from 0.16 to 0.47. The significant drop in road density over the decade under discussion demonstrates how road infrastructure in the region has generally deteriorated with the passage of time. The fact that the region lags behind others has implications for transport costs, productivity and competitiveness. Poor performance on transport costs, productivity and competitiveness doesn't augur well for internal and external trade.

*Railway*

Rail transport is a better option for high-volume commodities considering unit transport cost. Experts also agree that railways has a great potential to provide arteries of the transport network by providing connections between remote and far-flung locations to important centres of economic activity. This can be achieved by working with logistics service providers and road transporters to generate hubs for moving traffic to railway stations and in the process establishing quality, reliable multimodal services (World Bank, 2020).

In the nineteenth century when railways were built by colonial governments in SSA, they were meant to facilitate extraction of natural resources from the hinterlands. The railways transported the minerals and other natural resources to the coast and waterways for export to the metropoles. By 1901, Britain had constructed a 931 km metre gauge railway across the East African Rift Valley: from Uganda to Kenya. Before independence in the two countries, the Uganda Railway Company controlled the network. This was divided into two entities for the two countries after they attained independence in the 1960s. The evolution of the railways transport in many parts of Africa follows similar storylines, whether we are dealing with former French or Portuguese colonies. The railway infrastructure in Africa was largely funded by colonial governments.

[2] The cost of Africa's poor road and rail connections—Investment Monitor.

It is estimated that the total length of railway lines in Africa is 75,000 km. This is less than one-third of what exists in the US and less than the high-speed train network in China. Yet the limited existing infrastructure is not performing optimally. For instance, only 32 out of the 55 African countries have an operational railway system, according to the World Bank (2020). The railway systems that were built by the colonial governments have collapsed or at best deteriorated badly. Among the reasons identified for the bad state of the railway systems are mismanagement, poor corporate governance of state-owned institutions overseeing the railway companies and underinvestment. Competition from road transport following independence has also not helped. After independence, African countries focused more attention on building new roads and in the process completely neglected existing railways infrastructure. There was hardly any new investment in the existing infrastructure or attempts at expanding the networks. The World Bank suggests that five decades ago the railways accounted for most of the freight traffic in African countries but this is no longer the case. Most of the freight has shifted to the roads.

Currently, a large section of the rail network that operates in Africa, apart from South Africa and in recent time Senegal and Kenya, largely runs on colonial-legacy infrastructure that hasn't seen any improvement. The railways operates low axle-loads, low-speed, small-scale and largely under-capitalised network. Because of the prolonged period of underinvestment, large sections of the network have deteriorated to the extent it wouldn't make economic and financial sense to revive (World Bank, 2020).

A greater part of Africa's functioning railways networks are located in Southern Africa (Table 23.2). The routes in West Africa and Central Africa are estimated at less than 10,000 km. Southern Africa and East Africa have 35,000 km and 15,000 km. The railway traffic in SSA is, therefore, concentrated in Southern and East Africa sub-regions. Generally, railways on the continent carries more freight than passengers. An outcome that is consistent with reason for the creation of the networks by the colonial powers in the nineteenth century when they constructed the lines to carry natural resources from the interior to ports for export to Europe. Railway lines in most countries are predominantly used for hauling natural resources to the ports for export to international markets. Railway networks that are predominantly used to haul natural resources can be characterised as mineral railway lines. This is the dominant form of railway service found in most countries. There are other characterisations of the railway networks. These are new railways, legacy railways and commuter railways. Apart from mineral railway systems, the other networks also face serious financial challenges, particularly around underinvestment. They also deal with pressing operational difficulties including traffic volumes (World Bank, 2020).

Commuter trains are less common. Even South Africa, which until recently had a vibrant commuter network, is witnessing a deterioration of the network due to a myriad of issues, including underinvestment, inefficient investment, looting and pillage (Williams, 2021).

**Table 23.2** Rail networks in Africa

| *Country* | *Network density* | | *Operating line (Km)* |
|---|---|---|---|
| | *Km/000 km²* | *Km/mill pop.* | |
| Benin | 3.8 | 38.0 | 438 |
| Burkina Faso | 1.9 | 27.0 | 532 |
| Ghana | 0.5 | 4.0 | 109 |
| Guinea | 1.6 | 31.0 | 383 |
| Cote D'Ivoire | 2.0 | 25.0 | 631 |
| Liberia | 2.2 | 25.0 | 241 |
| Mauritania | 0.7 | 165.0 | 728 |
| Nigeria | 4.0 | 19.0 | 3732 |
| Senegal | 3.5 | 44.0 | 692 |
| Togo | 1.4 | 10.0 | 82 |
| Cameroon | 2.1 | 39.0 | 983 |
| Congo, Rep. of the, | 2.3 | 152.0 | 795 |
| DRC | 1.7 | 48.0 | 4000 |
| Gabon | 2.4 | 306.0 | 648 |
| Djibouti | 4.0 | 97.0 | 93 |
| Eritrea | 1.0 | 36.0 | 115 |
| Ethiopia | 0.6 | 6.0 | 663 |
| Kenya | 5.6 | 63.0 | 3250 |
| Sudan | 2.3 | 103.0 | 4313 |
| Tanzania | 3.9 | 65.0 | 3682 |
| Uganda | 1.3 | 8.0 | 325 |
| Angola | 2.2 | 87.0 | 2693 |
| Botswana | 1.5 | 393.0 | 886 |
| Malawi | 6.2 | 40.0 | 733 |
| Eswatini | 17.3 | 265.0 | 301 |
| Madagascar | 1.5 | 33.0 | 875 |
| Mozambique | 3.7 | 98.0 | 2878 |
| Namibia | 3.3 | 1098 | 2687 |
| South Africa | 19.0 | 402.0 | 23,219 |
| Zambia | 2.8 | 122.0 | 2109 |
| Zimbabwe | 8.0 | 218.0 | 3145 |

Source: World Bank (2020)

The motivation for constructing new railway networks in post-independence Africa has changed considerably. These countries consider the importance of commuter traffic in the design and building of new systems.

In the past few years, new railway infrastructure has been completed in a few countries. Senegal's $1.3 billion commuter line, Train Express Regional (TER), a 55 km line which connects the Blaise Diagne International Airport to Dakar, was completed in 2021. This is the first new railway line in Senegal since independence in 1960. The $4.2 bn electric railway line and rolling stock that runs from Addis Ababa in Ethiopia to Djibouti is worthy of note. Each train has the capacity to transport freight payload equal to that which can be carried by 200 trucks. In the past the 750 km journey was covered in three days. The new railway makes it possible to do the same distance in 12 hours.

Kenya's 609 km standard gauge railway linking Mombasa in the east coast to Nairobi with a price tag of $3.2 bn is an integral part of a bigger East African Rail Master Plan. The plan seeks to build a railway system linking Kenya, Uganda, Rwanda, South Sudan and Ethiopia (Investment Monitor 24 June 2021). These railway lines notwithstanding, Africa is far behind on railway infrastructure and service. But there are also very wide variations in network density and length of operating lines across countries in the region.

The length of railway line in kilometres operated per 1000 square kilometre of land area than 4 km on the average in Africa. There is a high of 19 km for South Africa and low of 0.5 km for Ghana. Europe has more than 120 km in Switzerland, 67 km in UK and 49 km in France. In terms of length, Canada has 67,000 km, France 27,000 km and 16,000 km for the UK (these numbers need to be interpreted with caution because the countries vary widely in size). For example, France is about twice the size of UK (United Nations Economic Commission, UNECE Statistical Database).

When SSA's railway density is compared with that of other regions of the world, SSA's situation is concerning. SSA has the lowest density in the world and yet conditions of the infrastructure have further deteriorated. For example, during the period 1990 to 2014, railway density in SSA halved from 0.004 km of railway line per square km of land area to 0.002 km (World Bank, 2018).

*Air Transport*

Air transport is an important feature of modern economies. It allows city pair connections that facilitate the flow of critical economic activities between markets. Air transport offers rapid transportation network between economic agents across countries and thereby supporting not only trade but also tourism, investment and many economic activities. The IATA recounts the benefits of air transport by looking at how over the years improvements in air transport technologies and infrastructure have reduced length of the trip from London to Sydney. In the 1970s it took four days to make the journey with six stops: Rome, Cairo, Karachi, Calcutta, Singapore and Darwin (Australia). These days, the same trip can be made in less than 24 hours (IATA, 2022a).

In 2019 about 61 million tons of freight was carried by air with a value of $6.5 trillion, accounting for 35% of all international trade. One out of two international tourists travels by air. Aviation contributes 4.1% to the global GDP. Air transport also provides 87.7 million jobs worldwide. It is imperative that countries and regions that seek to participate in the global economy fully have good connectivity with the rest of the world (IATA, 2022b).

IATA defines connectivity as a measure of the degree to which air transport connections support a country's economic development efforts and its productivity. The connectivity measure, therefore, takes into account air transport passengers' ability to effortlessly travel from one country to the other in the shortest possible time and for shippers to transport freight speedily and efficiently from one place to the other. Intra-Africa air transport connectivity is poor.

When we examine the percentage of direct connections between all the countries within a region or towards another African region in relation to the

total number of possible connections we get the sense direct links are weak. West Africa, which has the highest rate of intra-regional connectivity, comes up with 52% (Table 23.3). This is followed by Central Africa (45%) and North Africa (45%). Inter-regional connectivity is challenging. For example, between Northern Africa and Southern Africa the rate is 1%. The best intra-regional connectivity is between Northern Africa and Western Africa at 27%.

Five African countries have direct flights to 20 or more other African countries out of the 54. These are Ethiopia (35), Morocco (25), Kenya (25), Nigeria (21) and South Africa (21). And nine have direct air connection with less than ten other countries (Fig. 23.3). The low level of direct air connections has been a concern for many years. There is anectodical evidence that suggests that people from the continent have had to travel to a European city in order to catch

**Table 23.3** Connectivity between African regions

| | *Central Africa* | *Eastern Africa* | *North Africa* | *Southern Africa* | *Western Africa* |
|---|---|---|---|---|---|
| Central Africa | 45% | 13% | 20% | 9% | 22% |
| Eastern Africa | | 37% | 9% | 20% | 8% |
| Northern Africa | | | 45% | 1% | 27% |
| Southern Africa | | | | 36% | 2% |
| Western Africa | | | | | 52% |

Source: AFRAA (2023)

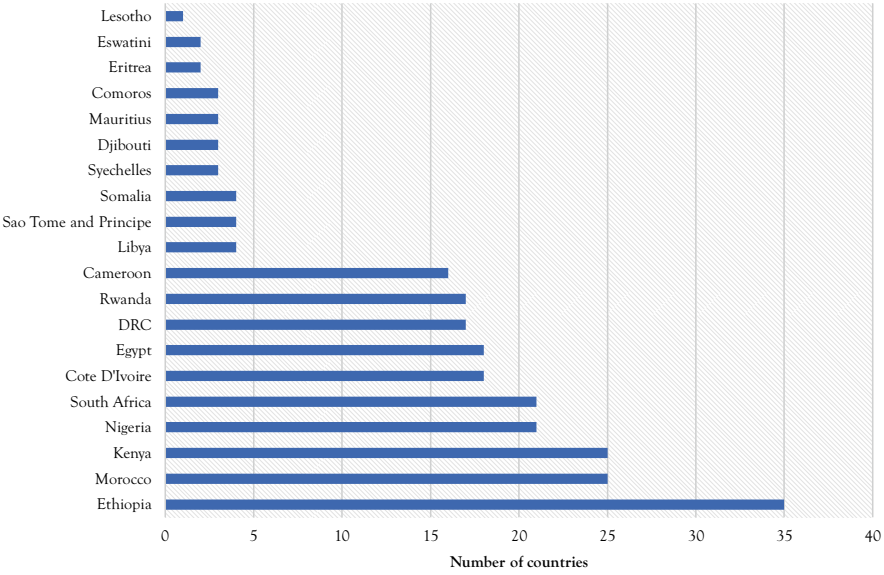


**Fig. 23.3** Number of direct flights between African countries. (Source: IFAA)

a flight to a neighbouring African country because of the absence of direct flights. Sometimes even when they exist, the low frequency justifies moving out of the continent and then flying back with a foreign carrier.

*Sea Ports*

Maritime transport is the predominant means of transport for world trade in merchandise. According to UNCTAD, 80% of the world's trade in merchandise is transported via the oceans. The figure in Africa is estimated at 90%. Through containerised shipping, merchandise is moved from one country to other (UNCTAD, 2018). It is therefore important that coastal countries have the necessary port infrastructure to facilitate trade in merchandise. Many studies have shown the importance of reduced transaction costs and positive international trade outcomes. Even though many developing countries are taking advantage of containerised shipping to increase their participation in international, it is believed that African countries have not achieved their full trade potential because of the poor state of their sea port infrastructure. The liner shipping connectivity index (LCI) provides information about a country's position within global liner shipping networks.[3]

From the LCI it can be inferred that the world's most connected economies are in South East Asia. This is followed by Europe. The most connected economies in Africa, Egypt and Morocco with their Mediterranean ports lag behind their European counterparts. And the three most connected economies in sub-Saharan Africa, South Africa, Ghana and Togo are comparable in connectivity to those in South America. Incidentally, all the African countries have seen marked improvements except South Africa where performance has been stagnant (see Fig. 23.4) (UNCTAD, 2022).

The quality of port infrastructure in African countries is critical for trade not just in the coastal countries but adjoining land-locked countries. This is because the continent has a large number of land-locked countries. Thirty percent (16) of the 55 countries in Africa are land-locked.

Table 23.4 provides information on the contract rates that are charged by shipping lines for intra-regional and intercontinental shipments. These rates include all surcharges such as terminal handling charges. Africa has the highest average intra-region freight cost over the period 2018–2020 at $1862 for a 40-foot shipping container. In Latin America and North America, the intra-regional cost is about $1529 and $1516. Europe and Asia have the lowest intra-regional freight costs. It is therefore not surprising that the two regions are leading participants of global value chains for most products.

[3] According to UNCTAD, the index is based on the number of ship calls, their container carrying capacity, the number of services and companies, the size of the largest ship and the number of other countries that are connected through direct shipping line services.

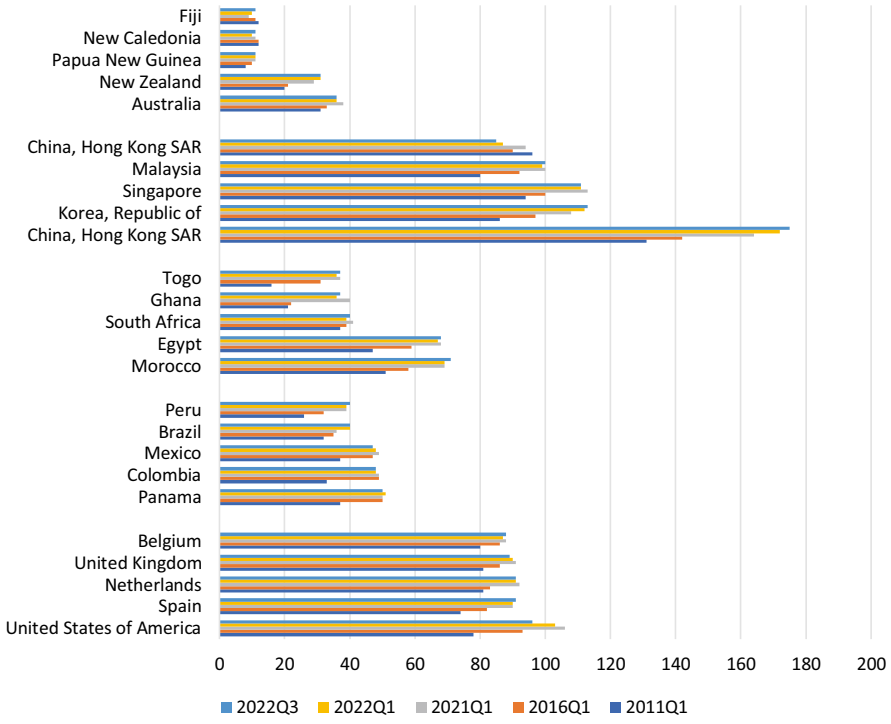


**Fig. 23.4** Liner shipping connectivity index of most connected economies by region (China 2006 Q1 = 100). (Source: Author's based on data from UNCTAD, 2023)

### *23.3.4 Information and Communication Technology (ICT)*

At the core of the important drivers of economic growth is productivity. This is a fact that most economists agree on. In recent times the importance of information and communication technology (ICT) as a critical economic infrastructure in driving productivity has come to the fore (Cardona et al., 2013; The World Bank, 2019). ICT also serves as an enabler of internal or external trade (Freund & Weinhold, 2004; Rodríguez-Crespo & Martínez-Zarzoso, 2019). ICT supports trade in many profound ways. For instance, ICT innovations reduce transaction costs both on the demand and supply sides considerably and thereby enhance firm competitiveness in trade. Again, transaction costs associated with uncertainty can be reduced directly through increased access and adoption of appropriate ICT.

The population of the 54 countries in Africa is 1.3 billion. Of the 47 countries in the world that are classified as least developed countries, 33 of them are in Africa. Five of the countries in Africa are described as small island developing states (SIDS) and 15 are land-locked developing countries (LLDCs). The continent has considerable development challenges in many areas of endeavour among which is infrastructure: social, financial and economic. But not all

**Table 23.4** Contract freight rates, inter-regional, 2018–2020, $ per 40-foot container (FEU)

| *From* | *To* | *Average 2018–2020* |
|---|---|---|
| Africa | Africa | 1862 |
| | Asia | 758 |
| | Europe | 1607 |
| | Latin America | 1950 |
| Asia | Africa | 1948 |
| | Asia | 768 |
| | Europe | 1848 |
| | Latin America | 2198 |
| | North America | 2580 |
| | Oceania | 1803 |
| Europe | Africa | 1701 |
| | Asia | 947 |
| | Europe | 887 |
| | Latin America | 1232 |
| | North America | 1838 |
| | Oceania | 2002 |
| Latin America | Africa | 1910 |
| | Asia | 1798 |
| | Europe | 1751 |
| | Latin America | 1529 |
| | North America | 1716 |
| North America | Africa | 2994 |
| | Asia | 1129 |
| | Europe | 1097 |
| | Latin America | 1353 |
| | North America | 1516 |
| | Oceania | 2772 |

Source: UNCTAD (2022)

African countries are of the same level in terms of infrastructure development. The characteristics of structural impediments to hinder infrastructure development differ significantly across African countries. For example, because LLDCs do not have direct access to the sea, it makes international connectivity more challenging and costly. On the other hand, most LLDCs have large rural populations. The population distribution over vast expanse of land is often sparse, thus making the installation of land-based communication infrastructure prohibitive, financially and economically unjustifiable.

As already pointed out, there are vast differences in the trends regarding the access of various ICT infrastructure and services. But first, let us look at some key ICT statistics for the continent as a whole. Internet access and use has increased somewhat marginally from 24.8% in 2017 to 28.9% in 2020, when we consider individuals using the Internet. There is, however, a greater improvement in the proportion of people per 100 inhabitants who are using the Internet via mobile broadband. This has increased from 25.5% to 33.1% over the same period. The proportion of the population that use the Internet is more than 50% for the small island states of Mauritius, Carbo Verde and Seychelles. (Fig. 23.6). In a large number of countries less than two out of five

people use the Internet. Fixed broadband access is rather very low. A paltry 0.4 out of 100 inhabitants in 2017 accessed the Internet through a fixed broadband and the figure increased marginally to 0.5 in 2020 (ITU, 2021). The mobile network coverage in Africa is not universal, but appreciably high at 88.4%, with a 3G network available at 77.4% and 4G at 44.3%.

*Access to Fixed Broadband and Other Internet Technologies*

The African continent has one of the lowest subscription rates of fixed broadband Internet access, according to the International Telecommunications Union (ITU), a United Nations institution. This is because the continent lacks legacy infrastructure and therefore it is cheaper to roll-out wireless broadband infrastructure. International connectivity depends on bandwidth availability. But despite the recent increase in bandwidth, the continent's Internet bandwidth represents just 1.5% of the global bandwidth. A few countries are outliers regarding access to fixed broadband subscription in Africa. In these countries access to fixed broadband Internet access subscription is higher than the sub-Saharan. The countries are Seychelles, where 35.6 per 100 inhabitants have access to fixed broadband; Mauritius with 25.3 per 100 inhabitants and 11.3 per 100 inhabitants in Tunisia. Most of the remaining countries have less than one in 100 inhabitants with broadband Internet subscription (Fig. 23.5). At the bottom of the ranking are countries that have less than 0.3 access per 100% inhabitants. Twenty countries are in this category.

To enhance its digital connectivity for trade and economic transformation, the continent needs adequate infrastructure for international connectivity in the form of submarine cable, international fibre and satellite. ITU data suggest that by 2019, 28 ITU Member States had at least one submarine cable landing.

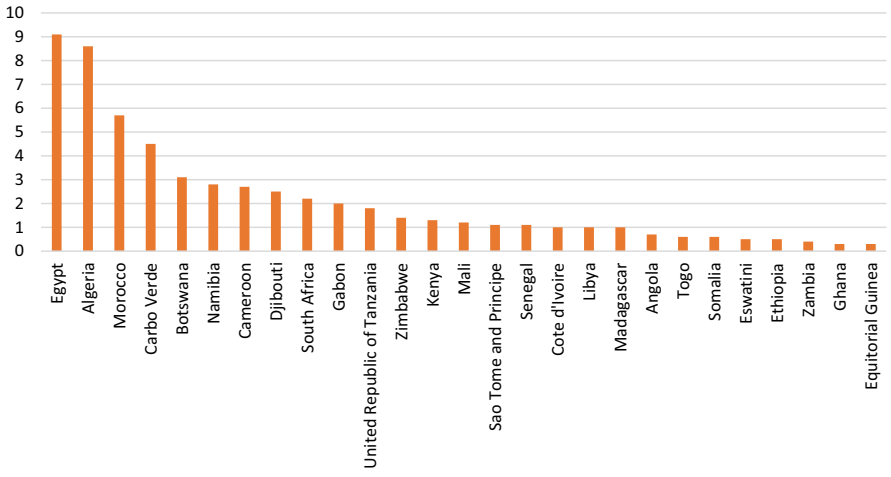


**Fig. 23.5** Fixed broadband subscriptions per 100 inhabitants, 2020. (Source: African Statistics Year Book (UNECA et al., 2021))

**Table 23.5** Submarine cable landing

| *1 cable* | *2 cables* | *3 cables* | *4 cables* | *5 cables* | *6 cables* | *11 cables* |
|---|---|---|---|---|---|---|
| Republic of Congo | Benin | Carbo Verde | Angola | Ghana | Nigeria | South Africa |
| Togo | Equatorial Guinea | Libya | | | Kenya | |
| Liberia | Gabon | Tanzania | Cote d'Ivoire | | Cameroon | |
| Sierra Leone | Dem. Rep. of the Congo | | | | | |
| Guinea | Namibia | | | | | |
| Guinea-Bissau | Mozambique | | | | | |
| Gambia | Seychelles | | | | | |
| Sao Tome | Comoros | | | | | |

Source: ITU (2021)

The land-locked ITU Member States in Africa depend on satellite or international fibre link capacity. Table 23.5 shows the number of submarine cables that Member States have. South Africa has 11, the highest number. Most countries have either one or two submarine cables. Almost one out of two people in Africa is more than 10 km away from a fibre network infrastructure.

The proportion of the population that use the Internet is more than 50% for the small island states of Mauritius, Carbo Verde and Seychelles. South Africa is the only mainland country that has Internet usage of more than 50% (Fig. 23.6). In a large number of countries the ratio of the population that use the Internet is less than 20%.

*Telephones: Main Lines and Mobile Cellular*

Fixed-line telephones are not as widespread as mobile telephones. There are a few countries that have five or more main telephone lines per 100 inhabitants. The small island states, Mauritius (30.2), Seychelles (22.5) and Carbo Verde (12.1), are the notable countries with high penetration of main telephone lines. On the mainland, Libya (16.6), Tunisia (8.4), Botswana (7.6) and South Africa (7.5) have relatively high availability of main lines as of 2015. However, five years later, the main telephone lines in these countries and many others have fallen considerably. For example, South Africa's main telephone lines have more than halved from 7.5 to 3.5 per 100 inhabitants. Generally, the number of main telephone lines per 100 inhabitants is falling in most countries precipitously. Incidentally, the Northern African countries are the ones who have bucked the trend by increasing the main telephone lines per 100 inhabitants over the period under discussion (UNECA et al., 2021).

Mobile telephones have made a tremendous impact on telephonic connectivity in Africa. The role of private sector investment in creating the relative high level of access through investment is commendable. Many countries had low penetration of fixed-line telephones for years. Following the liberalisation

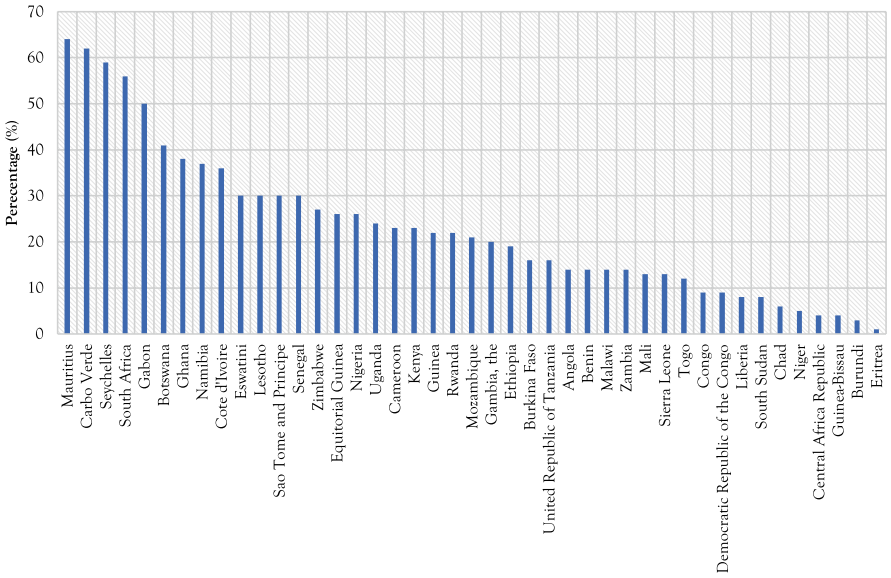


**Fig. 23.6** Percentage of individuals using the Internet, Africa region, recent years (2017, 2018 or 2019). (Source: ITU (2021). Notes: Data for 2019 were available for Mauritius, Carbo Verde, Côte d'Ivoire and Kenya and data for 2018 were available for Guinea, Zambia and Niger. For all other countries, the latest available data were for 2017 (except for Nigeria, where the most recent year was 2016))

of the telecommunication sector in Africa in the early 1990s, there was a wave of private sector investment in mobile telephony. The private sector investment in mobile telephony has been phenomenal. While mobile telephony infrastructure in Africa is relatively better than most types of infrastructure, there is room for improvement. According to GSMA (2022), the adoption of the latest mobile telephone technology, (5G), in Africa lags behind other regions of the world. 5G adoption in Africa is 4%, this compares unfavourably with the figures for Latin America, which is 12%, and for Middle East and North Africa (MENA) regions, which is 11% (GSM, 2021).

GSM 3G is the dominant technology in SSA. Even though there have been two generations of mobile technology since the emergence of 3G, the more advanced generations of mobile technology, 4G and 5G, represent 20% of the technology used in most countries. The mobile phone subscriber penetration rates varies from a low of 42% in the Economic Community of Central African States (ECCAS) region, to a high of 49% in the Economic Commumity of West African States (ECOWAS) area. Southern Africa Development Commumity (SADC) has an average subscriper penetration rate of 46% and for East African Community (ECA), excluding Ethiopia, the figure is 44% (Ethiopia, 33%). (GSMA, 2021). The impact of mobile telephone ecosystem on productivity growth in Africa is expected to bring greater efficiency to the economies and thereby enhance trade competitiveness.

## 23.4 Conclusions and Policy Recommendations

Infrastructure and connectivity are the backbone of a functioning economy. They stimulate employment creation, economic growth and development. But the examination of the state of infrastructure in Africa suggests the existence of considerable gap across all types of infrastructure. Africa's infrastructure in all the key areas lags the rest of the world. For example, poor electricity supply situation in Africa is the biggest threat to economic growth and job creation. Access to reliable electricity supply reduces the cost of doing business, stimulates economic growth and facilitates job creation.

The infrastructure deficit is so huge to the extent that no government is able to generate the requisite financial resources to fund the investment needed to fund the infrastructure deficit. Even though mobile telecommunication sector also has gaps, there has been much more progress in that sector of infrastructure development than any other sector. There are, therefore, clear and valuable lessons that can be learnt from the private sector's role in telecommunication development.

Governments must encourage greater private participation in all areas of infrastructure development. This can be achieved through appropriate policy interventions and regulatory frameworks. The expected financial returns from private sector investment must be safeguarded to give comfort to investors. Lastly, governments must provide financial and non-financial incentives to stimulate investments in infrastructure development.

It is also important to ensure that town and country planning prioritise densification and forestall the emergence human settlement sprawls, especially in the urban centres. Urban populations spread over wider geographical location entail higher cost of installation of physical infrastructure such as water and sewage distribution and reticulation networks. An efficient and effective infrastructure is a prerequisite for business performance and trade.

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CHAPTER 24

# Trade Facilitation in Africa: A Review of Concepts and Empirical Facts

*Paul Terna Gbahabo, Foluso Akinsola, and Gloria Afful-Mensah*

## 24.1 Introduction

Economic theory suggests that trade facilitation measures can stimulate economic growth through their ability to expand cross-border trade flows, creating a virtuous cycle of improved income and welfare (Wilson et al., 2003). Trade transaction costs of transportation and communication and tariff barriers (tariff stood at 5% for OECD economies and 10–20% for most developing economies in 2011) have been significantly reduced such that the greatest obstacle to trade lies behind the border in the form of bureaucratic inefficiencies, red tape, and incoordinate procedures stemming from multiple documentation and time-consuming requirements (Cadot et al., 2011). Similarly, decades of multilateral, regional, and unilateral efforts have significantly declined traditional trade barriers such as tariffs. However, regulatory heterogeneity is increasingly perceived in the literature as a non-negligible source of trade costs (Nordås, 2016). As protectionist tariff rates decline, understanding

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_24

the relationship between trade facilitation, that is, behind-the-border measures, and trade flows becomes increasingly important. These relationships are complex and multifaceted, as trade flows are affected by a country's reforms and those of its trading partners (Wilson et al., 2005; Gammadigbe, 2021).

Despite its potential, the trade performance of Sub-Saharan African countries is abysmally poor, with her share of world exports dropping by nearly two-thirds in the past three decades (Portugal-Perez & Wilson, 2009). If this trend had not occurred, Africa's export revenue would be approximately ten times larger than it is currently (Portugal-Perez & Wilson, 2009). Poor trade performance in Africa can be attributed to inactive intra-regional trade, high tariffs and non-tariff barriers, high costs of doing business, weak institutions, and inadequate technology and infrastructure (Portugal-Perez & Wilson, 2009). Trade facilitation is a key driver of economic growth and development and a key policy area for African countries seeking access to new markets to boost and increase their export competitiveness and facilitate integration into the global economy.

Following this introduction, Sect. 24.2 provides some conceptual definitions and measurements of trade facilitation. Section 24.3 follows with a review of the cost and benefits of trade facilitation. Section 24.4 presents the stylised facts on trade facilitation using data from selected African economies. The theoretical framework underpinning trade facilitation and a critical assessment of Trade Facilitation Agreement are presented in Sects. 24.5 and 24.6, respectively. Finally, Sect. 24.7 concludes the chapter.

## 24.2 Conceptualisation and Measurement of Trade Facilitation

### *24.2.1 Conceptual Definition of Trade Facilitation*

Trade facilitation refers to eliminating inefficiencies that undermine cross-border trade by cutting through the red tape, removing bottlenecks and unnecessary documentation, and streamlining, simplifying, and harmonising trade rules and procedures to increase transparency, predictability, and accessibility (Wilson et al., 2003). Although there is no commonly accepted definition of trade facilitation, Woo and Wilson (2000) define trade facilitation as measures aimed at improving efficiency in the administration, procedures, and logistics at ports and customs points. However, the World Trade Organisation (WTO) refers to trade facilitation as the simplification and harmonisation of international trade procedures, where trade procedures imply collecting, presenting, communicating, and processing data required to move goods in international trade. But in the Doha Declaration, the WTO refers to trade facilitation as measures expediting the movement, release, and clearance of goods, including goods in transit.

Despite the diverse perspective, trade facilitation generally refers to a broader spectrum of issues, including technical barriers to trade (TBT), competition policy, government procurement, and transparency, and encompasses a broad swathe of policies and technical regulations, institutions, standards, and infrastructure associated with the cross-border movement of goods and services

(OECD, 2005; Gammadigbe, 2021). While there is no consensus on a single definition, trade facilitation is often conceptualised along two broad perspectives: harmonisation and compliance with international border procedures; and removal of bureaucratic red tape and other port inefficiencies (Portugal-Perez & Wilson, 2012). Whatever the perspective and scope of definition, trade facilitation measures seek to streamline and simplify the process of cross-border trade (see Box 24.1). These measures include various policies, including

**Box 24.1 Various Definitions of Trade Facilitation Based on Different Perspectives**

*Harmonisation and compliance with international procedures' perspective*

World Trade Organization (WTO): The simplification and harmonisation of international trade procedures, where trade procedures are the activities, practices, and formalities involved in collecting, presenting, communicating, and processing data required for the movement of goods in international trade.

United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT): The simplification, standardisation, and harmonisation of procedures and associated information flow required to move goods from seller to buyer and make payments.

*Border and port efficiency perspective*

World Customs Organization (WCO): Trade facilitation means the avoidance of unnecessary trade restrictiveness. This can be achieved by applying modern techniques and technologies while improving the quality of controls in an internationally harmonised manner. The WCO is mandated to enhance the efficiency and effectiveness of customs administrations by harmonising and simplifying customs procedures to achieve trade facilitation.

International Chamber of Commerce (ICC): Trade facilitation is the general term for a package of measures to help cut red tape at borders to improve the efficiency of the processes associated with trading goods across national borders. Border administrative efficiency would lead to easier, quicker, and less expensive processes that boost international trade volumes and integrate domestic firms into the global value chains.

Asia–Pacific Economic Cooperation (APEC): Trade facilitation simplifies and rationalises customs and other administrative procedures that delay or increase the cost of moving goods across international borders.

Organisation for Economic Co-operation and Development (OECD): Trade facilitation refers to policies and measures to reduce trade costs by improving efficiency at each stage of the international trade chain.

*Source:* ADB and United Nations Economic and Social Commission for Asia and the Pacific (2013)

eliminating bureaucratic bottlenecks at customs borders and ports of entry, improving transport and logistics infrastructure, and providing accessible digital information on the Internet to all parties engaged in international trade (Wilson et al., 2003). At its core, trade facilitation aims to reduce trade transaction costs by reducing the cost and time associated with the movement of goods, making international trade easier and a wider variety of consumer goods and services more accessible (Wilson et al., 2003).

### *24.2.2 The Principles of Trade Facilitation Measures*

Trade facilitation measures are policies and practices that aim to make international trade more efficient and cost-effective (Rubínová & Sebti, 2021). Four principles underpin trade facilitation measures: transparency, simplification, harmonisation, and standardisation (UNECE, 2012; ESCAP, 2017). Adopting these principles by policymakers in Africa can go a long way in reducing the costs and risks associated with international trade, boosting cross-border trade flow, promoting efficiency and effectiveness, and fostering economic growth and development.

Transparency means trade procedures should be clear, predictable, and easily accessible by publicly availing information on trade-related laws and policies, regulations, and fees and establishing an effective system for resolving trade disputes. Governments can aid in reducing the costs, time, and risks associated with international trade by reforming the regulatory environment and enabling firms to operate more efficiently and effectively (OECD, 2005; ADB and ESCAP, 2013).

Simplification entails streamlining and simplifying trade procedures and paperwork by eliminating unnecessary forms and documentation, using electronic systems to facilitate the exchange of information, and reducing red tape and bureaucracy (ADB and ESCAP, 2013). By simplifying trade procedures, governments can facilitate reducing the time and costs associated with international trade, making it more attractive for firms to engage in international trade (UNECE, 2012).

Harmonisation refers to the idea that trade procedures should be consistent across different countries through the development of international standards and the adoption of common practices, such as using a single window for customs procedures (ADB, 2013). Governments can facilitate trade by reducing the complexity and uncertainty associated with cross-border trade, thus boosting trade flow and promoting trade efficiency and effectiveness (UNECE, 2012).

Standardisation comprises the development and adoption of common standards for goods and services and the testing and certification of these products by establishing independent bodies to set and enforce standards and adopting internationally recognised standards, such as those developed by the International Organization for Standardization (ISO) (ESCAP, 2017). Governments can institute measures to facilitate trade by improving the quality and safety of goods and services and increasing their competitiveness in global markets (ESCAP, 2017) (Fig. 24.1).

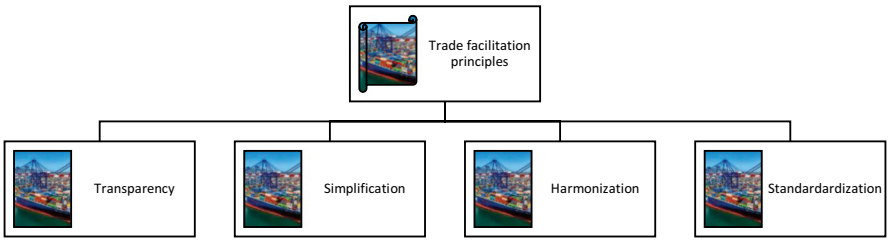



**Fig. 24.1** The four pillars of trade facilitation. (Source: National Board of Trade Sweden, ESCAP [2017])

### *24.2.3 Measurement of Trade Facilitation*

Given the broad scope of trade facilitation, finding a single standard metric for measuring and evaluating the different policy categories of trade facilitation remains a conceptual challenge. Therefore, there are many different measures of trade facilitation, accordingly. According to Wilson et al. (2003), four indicators capture the four distinct dimensions of trade facilitation, namely: *Port efficiency*—designed to measure the quality of infrastructure of maritime, road, air, and rail transportation (transport corridors and airports); *Customs environment*—designed to measure direct customs costs as well as administrative transparency of customs and border procedures; *Regulatory environment*—designed to measure an economy's approach to regulations; and *E-business usage*—designed to measure the degree to which an economy has the required domestic e-business infrastructure.

Further, the World Bank's *Doing Business: trading across borders* indicator measures the time and costs associated with the logistics of exporting and importing goods, comprising three sets of procedures: (i) documentary compliance, (ii) border compliance, and (iii) domestic transport.

However, the World Economic Forum's *Enabling Commerce Index* is an alternative indicator that evaluates the effectiveness of government policies and regulatory frameworks in promoting international trade. The evaluation criteria include access to domestic and international markets, availability and quality of transportation infrastructure and services, ease of crossing borders, and travel safety, which all play a role. Access to and usage of ICTs, and the degree (the extent) to which economies are free to operate (experience) open market (trade liberalisation).

Similarly, the World Bank's *Logistics Performance Index* is an alternative indicator that measures the effectiveness of countries' customs and border clearance procedures, trade and transport infrastructure, the simplicity of arranging competitively priced shipments, the proficiency and quality of logistic services, and the regularity with which shipments arrive at consignments within the scheduled and delivery time.

Finally, the OECD's *trade facilitation indicators* (TFIs) comprise 16 indicators based on 97 variables focused on capturing the main provisions of the World Trade Organisation's Trade Facilitation Agreement (see Fig. 24.2; Moïsé & Sorescu, 2013).

**The WTO Trade Facilitation Agreement**

| | |
|---|---|
| a. Information availability | [Art.1+2] |
| b. Involvement of the trade community | [Art.2] |
| c. Advance Rulings | [Art.3] |
| d. Appeal Procedures | [Art.4] |
| e. Fees and charges | [Art.6] |
| f. Formalities – Documents | [Art.7+10] |
| g. Formalities – Automation | [Art.7+10] |
| h. Formalities – Procedures | [Art.5+7+10] |
| i. Cooperation – Internal | [Art.9§1 and 2 ] |
| j. Cooperation – External | [Art.9§3+12] |
| k. Consularisation | [Art.8] |
| l. Governance and Impartiality | |
| m. Transit fees and charges | [Art.11] |
| n. Transit formalities | [Art.11] |
| o. Transit guarantees | [Art.11] |
| p. Transit agreements and cooperation | [Art.11] |

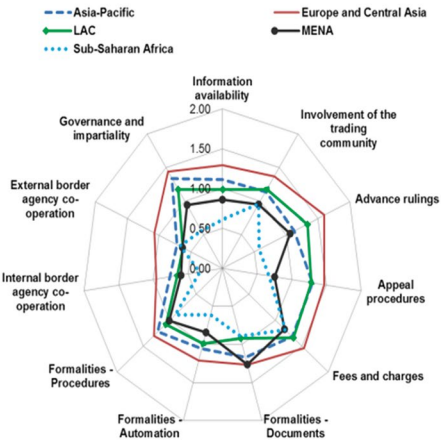



**Fig. 24.2** The OECD's trade facilitation indicators and regional performance in 2017. (Note: *The values for the trade facilitation indicators range between 0 and 2, where 2 denotes the best performance*. Source: Moïsé and Sorescu [2013] and Duval et al. [2018])

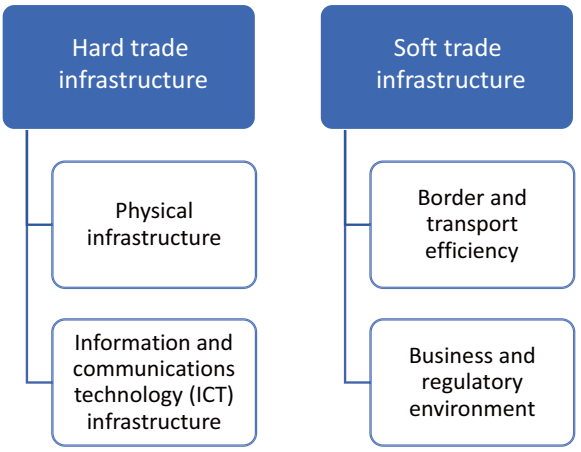



**Fig. 24.3** The two planks of trade facilitation measures

Overall, the different measurement indicators of trade facilitation measures address the hard and soft components of trade facilitation infrastructures (Estevadeordal, 2017; Go, 2018). The hard component of trade facilitation measures refers to improving the physical transport and logistics infrastructure, including the roads, railways, waterways, and ports, as well as the information and communication technology infrastructure, while the soft component of trade facilitation infrastructure refers to measures to improve, harmonise, and standardise the border procedures and logistics efficiency, and the business and regulatory environment (Portugal-Perez & Wilson, 2012; see Fig. 24.3).

## 24.3 Theoretical Framework on Trade Facilitation

The following section discusses some of the theoretical frameworks underpinning the concept of trade facilitation. At its core, these theories are attempts to provide logical explanations for the cost of trade as a major hindrance to international trade flows.

### *24.3.1 Preferential Trade Arrangements Theory*

The seminal work of Jacob Viner (1950) on international trade, *The Customs Union Issue*, is considered the foundational theory on preferential trade arrangements. In it, Viner introduced the concepts of **trade creation and trade diversion** to describe the effects of a customs union (a trade agreement between countries that reduces or eliminates tariffs on trade between member countries) on the trade patterns of member countries.

According to Viner (1950), **trade creation** occurs when the formation of a customs union increases trade among member countries. This happens when removing tariffs and other trade barriers make it more economical for member countries to trade with each other, increasing trade volume. On the other hand, **trade diversion** occurs when the formation of a customs union leads to a decrease in trade between member and non-member countries. This happens when removing tariffs on trade between member countries leads to a shift in the source of imports from non-member countries to member countries. As a result, the trade volume between member countries increases at the expense of trade between member and non-member countries.

Meade (1955) extended Viner's analysis in his 1955 paper "The Theory of Customs Unions", in which he argued that the overall impact of a customs union on trade patterns depends on the relative size of trade creation and diversion. If trade creation is larger than trade diversion, then the formation of a customs union will lead to an overall increase in trade. If trade diversion is larger, then the formation of a customs union will lead to an overall decrease in trade.

However, the trade creation and diversion effects, as described by Viner (1950) and Meade (1955), are now referred to in the literature as the static (immediate) changes in trade patterns that result from forming a preferential trade arrangement, such as free trade areas, customs unions, common markets, and monetary unions. These effects are calculated based on the differences in tariffs and other trade barriers between member countries and non-member countries before and after the formation of the trade arrangement.

In contrast, the dynamic trade creation and trade diversion effects, as described by Bhagwati (1992), refer to the long-term changes in trade patterns resulting from forming a preferential trade arrangement. These effects consider the potential impacts of the trade arrangement on investment, technological change, and other factors that can affect trade patterns over time. Bhagwati's approach to analysing the dynamic effects of trade arrangements is known as time-path analysis.

One key difference between the static and dynamic effects of trade arrangements is that the dynamic effects account for the potential for trade arrangements to have indirect effects on trade patterns through their impact on economic growth, technological change, and other factors. For example, a trade arrangement might lead to increased investment in member countries, leading to increased productivity, economic growth, and trade. On the other hand, the static effects of trade arrangements focus only on the direct effects of changes in tariffs and other trade barriers on trade patterns.

### *24.3.2 International Regulatory Cooperation and Trade Facilitation: A Theoretical Framework*

There is no universal consensus in defining international regulatory cooperation (IRC). Several scholars and organisations have hazarded different definitions. According to OECD (2017, p. 32), international regulatory cooperation can be defined as "any agreement or formal or informal arrangement between countries to promote a cooperation in the design, monitoring, enforcement, or ex-post management of regulation". The WTO states that "regulatory cooperation is about regulators from different governments engaging with one another on rules and principles for regulating markets in pursuing more compatible, transparent and simple regulations, and lowering trade barriers" (WTO, 2011, p. 2). However, trade-related IRC can be defined as cooperative approaches by two or more countries that aim to reduce costs in international trade of goods and services related to regulations and procedures without neglecting the objectives which underlie those regulations and countries' "right to regulate" (von Lampe et al., 2016, p. 7). From the divergent definitions, we observe that international regulatory cooperation essentially refers to the coordination and harmonisation of regulatory requirements, policy regimes, and procedures to reduce the cost of regulatory compliance arising from international differences across jurisdictions. It is incumbent on policymakers and regulators to address non-tariff barriers related to differences in regulations to minimise the trade costs of regulatory heterogeneity. Policymakers can draw from various IRC approaches to achieve regulatory convergence and harmonisation, including unilaterally, bilaterally, regionally, and multilaterally.

*Unilateral approaches* involve a single country adopting good regulatory practices, fostering evidence-based rule-making, which helps reduce unnecessary regulations and considers approaches adopted in other jurisdictions. Countries can pursue unilateral regulatory frameworks by adopting international standards in national frameworks that promote global regulatory convergence. Unilateral approaches can lower specification and conformity assessment costs when domestic regulatory standards and processes align and converge with international standards and good regulatory practices (GRP). However, policymakers and regulators must ensure that international standards are of high quality and serve the public interest in local jurisdictions. The following

are strategies that domestic regulators can employ to account for the international environment in domestic rule-making.

- Systematically accumulate evidence and expertise in other jurisdictions and incorporate relevant international standards and regulatory frameworks when enacting new regulations or reforming extant laws.
- Facilitate inclusive foreign stakeholder engagement on the implications of domestic regulation of international trade and gather information and incorporate feedback into the regulatory process.
- Embed consistency of domestic regulatory framework with international standards and other jurisdictions' regulatory frameworks.
- Establish a coordination mechanism in government on IRC activities to centralise relevant information on IRC practices and activities and to build consensus and common language.

*Bilateral or plurilateral (regional) approaches* involve cooperation between two or more countries on a specific issue. This can be done through the exchange of information and the development of joint regulations or standards. Countries can pursue regulatory cooperation at a bilateral or plurilateral level to develop common regulatory approaches or instruments across jurisdictions, such as through regional trade agreements. However, there is also the risk of regional fragmentation, given the multiplicity of regional trade agreements. Some bilateral or plurilateral (regional) regulatory cooperation mechanisms include mutual recognition, regulatory harmonisation, and transparency.

- Mutual recognition involves the acceptance of regulations or standards that have been developed in one country by other countries. This can be an effective mechanism for regulatory cooperation because it allows countries to build upon the regulatory frameworks that have already been established in other countries rather than developing new regulations from scratch.
- Harmonisation involves the development of common regulations or standards among countries. This can be done through the development of international agreements or by establishing international organisations responsible for setting standards. Harmonisation helps ensure that regulations are consistent across countries, facilitating trade and cooperation.
- Transparency mechanisms involve the sharing of information about regulatory practices and the development of regulations among countries. This can be done through the exchange of information, the development of common reporting systems, and the establishment of mechanisms for public consultation. Transparency mechanisms can help to ensure that regulatory practices are open and accountable and can also help to build trust and cooperation among countries.

*Multilateral approaches* involve cooperation among three or more countries on a specific issue by developing international agreements, such as the erstwhile General Agreement on Tariffs and Trade (GATT) or by establishing international organisations that regulate specific issues, such as the World Trade Organisation (WTO) and World Customs Organization (WCO). The WTO provides a multilateral regulatory framework for cross-border trade among member countries to ensure predictability, transparency, and certainty. It provides a notification system for regulatory measures with potentially significant trade effects and agreements on technical regulations, standards, or conformity assessment procedures between members. Also, it provides a multilateral platform for achieving less-restrictive trade regulations. Further, it is the only global international organisation saddled with a mandate to set trade rules and eliminate arbitrary and unjustifiable discriminatory treatment between nations (Fig. 24.4, OECD, 2020).

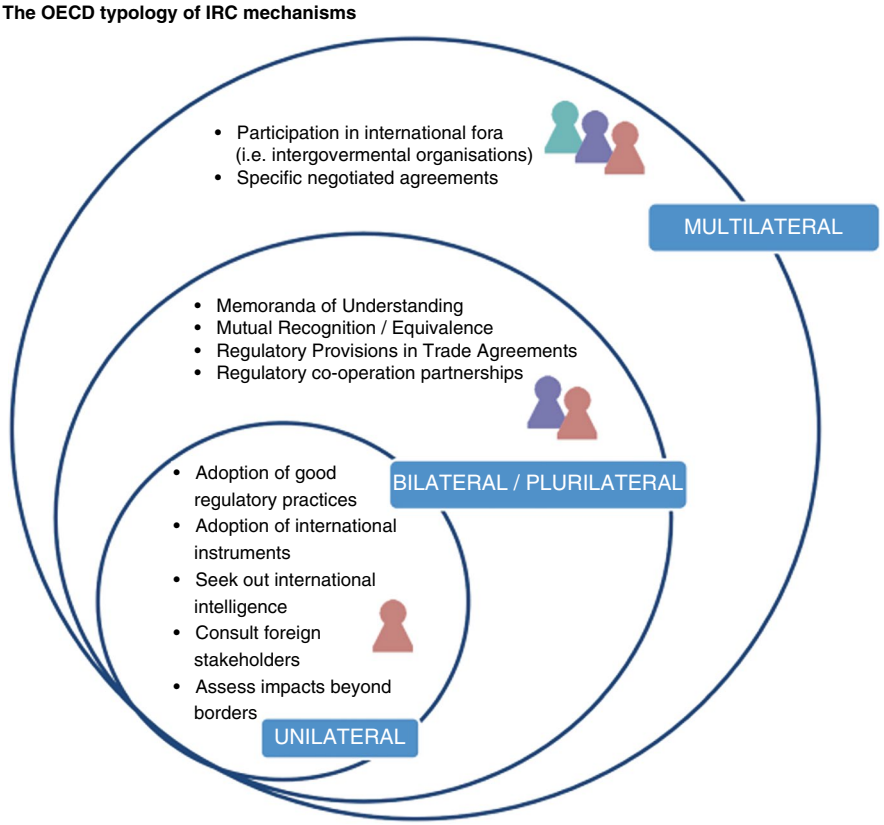

The OECD typology of IRC mechanisms
• Participation in international fora (i.e. intergovermental organisations)
• Specific negotiated agreements
MULTILATERAL
• Memoranda of Understanding
• Mutual Recognition / Equivalence
• Regulatory Provisions in Trade Agreements
• Regulatory co-operation partnerships
BILATERAL / PLURILATERAL
• Adoption of good regulatory practices
• Adoption of international instruments
• Seek out international intelligence
• Consult foreign stakeholders
• Assess impacts beyond borders
UNILATERAL

**Fig. 24.4** Different approaches/mechanisms of international regulatory cooperation (IRC)

**Box 24.2 The Different Regulatory-heterogeneity Trade Costs (OECD, 2020)**

Some of the major barriers to trade in contemporary times are no longer associated with tariffs and quotas but rather regulatory heterogeneity across jurisdictions. These divergent policy instruments increase cross-border trade costs, leading to trade diversion and reducing trade flows. The following are some trade costs associated with regulatory heterogeneity; specification costs, conformity assessment costs, information costs, and other heterogeneous customs costs.

*Specification costs* arise from adjusting, adapting, and complying with products and production processes to heterogeneous regulatory requirements in export markets. Specification costs are higher if regulations or standards are more divergent across jurisdictions. These costs can include the additional costs of labour and inputs or costs related to a lack of economies of scale. Specification costs can be related to compliance with either products or firm rules. Product rules-related specification costs accrue from specifying products, production processes, or labelling in compliance with divergent regulations from that prevailing in the home market. In contrast, firm rules-related specification costs accrue from equity restrictions, management restrictions, or the necessity of maintaining a permanent establishment in the regulated market.

*Conformity assessment costs* refer to the costs that are associated with ensuring and demonstrating that exported products and services conform with the regulatory requirements and standards of the target market. Conformity assessment costs may include the cost of testing and certifying, inspecting, and auditing foreign products' conformity with accredited assessment bodies in the destination country. Conformity assessment costs may accrue from heterogeneous assessment methods across jurisdictions, such as divergent laboratory tests, certification, inspection, and audit procedures, resulting in additional costs in the capital, labour and inputs, and time delay. Conformity assessment costs may also accrue from restrictive or rigid conformity assessment systems, which may insist that the importing country's conformity assessment system must conduct the testing and certification assessment.

*Informational costs* refer to the costs of identifying, gathering, and processing information on heterogeneous regulatory practices and requirements in different export market destinations. It also involves monitoring the regulatory environment in target export markets. The magnitude of information costs is a function of the extent of divergence and the transparency of target market regulatory regimes. The more divergent, opaque, and complex the system, the greater the costs.

(*continued*)

**Box 24.2 (continued)**

*Other costs* involve behind-the-border costs of customs procedures and the costs to regulators and inspectors. Customs border-related trade costs include the cost of customs clearance, documentary compliance, number of trade procedures, and indirect costs such as time delays, storage, and inventory costs. Policymakers can considerably reduce these costs by implementing single-window provisions and other initiatives at the bilateral or plurilateral level.

In summary, the heterogeneity-related trade costs of international regulatory cooperation can be high and present significant challenges for cross-border trade. Policymakers need to consider these costs when developing and implementing regulatory frameworks to achieve regulatory convergence and harmonisation to minimise their impact and ensure that the benefits of international regulatory cooperation outweigh the costs.

### *24.3.3 The Gravity Model*

The gravity model states that the volume of bilateral trade is an increasing function of the market size of trading countries and a decreasing function of their relative geographic distance or remoteness (Ismail, 2021). The gravity model is a workhorse of trade empirics commonly used to analyse the trade effects of various trade costs and implied welfare effects (Head & Mayer, 2014). However, other multilateral trade resistance variables (including transportation costs, border and documentary compliance costs, and other transaction costs) can substitute for distance in the model. Although the model has different variants and specifications, they all seek to explain the main link between trade barriers and trade flows.

In the context of trade facilitation measures, the gravity model can be used to explain the resistance "friction" or barriers to trade between countries, which must be overcome to increase trade flows. For example, if a country implements trade facilitation measures that can improve trade creation in both value and volume, the model will predict that trade with trading partners would increase as a result. While Tinbergen (1962) pioneered the model, it was Anderson (1979), Helpmann and Krugman (1989), Deardorff (1998), and Anderson and van Wincoop (2003) who established the theoretical foundation.

## 24.4 Cost and Benefits of Trade Facilitation in Africa

The literature categorises trade transaction costs (TTCs) as direct and indirect. The direct costs include customs fees, charges associated with port handling, and other informal payments. The indirect costs are typically associated with the waiting time required to complete a transaction (Minor & Tsigas, 2008;

OECD, 2003) which may be substantial where there are inefficient administration and customs procedures and cumbersome regulatory environment. Also, inadequate physical infrastructure contributes significantly to the high TTC (Portugal-Perez & Wilson, 2012; Sakyi et al., 2017). Africa is characterised by unreasonably high TTCs, making the region the most expensive for international trade (UNECA, 2013).[1] For instance, estimates from The World Bank's *Doing Business Database* for the period 2006–2015 valued the average cost to export and import in Sub-Sahara Africa (SSA) at US $2699.71 and US $3414.28 per container (deflated), respectively, with substantial regional variations. Empirically, the magnitude of TTCs in Africa is estimated to be between 1% and 15% of the value of traded goods, which are largely driven by the indirect cost component of the TTC (OECD, 2002, 2003; Minor & Tsigas, 2008), and the country-specific differences may be linked to public trade facilitation policies. This makes the implementation of trade facilitation measures very important in international trade. Therefore, this section shares some insights on costs and benefits of trade facilitation in Africa. Implementing trade facilitation measures can be costly but these costs are primarily in terms of financial resources required to carry out the measures and some potential revenue loss from trade taxes. However, failure to implement trade facilitation measures may be costlier. These costs include reduced trade and economic growth, increased costs for businesses, and lost opportunities for development as argued below.

*Reduced trade and economic growth*: High trade costs can negatively affect trade composition and flows, with disproportionate effects on small- and medium-size enterprises due to their size and resource constraints and women-owned enterprises. But trade facilitation can affect trade (volume and composition) positively (Engman, 2005; Wilson et al., 2005; Minor & Tsigas, 2008) through reduced trade costs, thereby increasing annual incomes and economic growth of participating countries. Some studies, for example, have estimated that 10% reduction in trade costs could lead to between 1% and 10% increase in GDP (UNCTAD, 2019). In a related study by Sakyi et al. (2017), their empirical results revealed how trade facilitation provided an important channel through which international trade affected economic growth in Africa, such that the greater the extent of trade facilitation, the larger the trade-induced economic growth experienced. This means that failure to implement trade facilitation measures can lead to higher trade costs and reduced trade, leading to slower economic growth.

*Increased costs for businesses*: Delays in custom clearance for instance may be costly, particularly with perishable goods, because of product losses and/or additional costs incurred from storage facilities. Even that, the severity of time delays as a cost in international trade may vary among countries. According to

[1] United Nations Economic Commission for Africa.

Djankov et al. (2006), for each additional day in which a product is delayed in its shipment, trade flow is reduced by at least 1%. Also, unclear trade procedure characterised by trade in most African countries provides an environment for corrupt activities at the ports in the form of payment of "unapproved monies", contributing to increased costs for doing business in the region. For instance, in Nigeria, fraud, corruption, and poor security at customs are estimated to increase the cost of imports by about 45% (Engman, 2005). Implementation of trade facilitation measures can therefore reduce the costs and risks associated with international trade, making it more attractive for businesses to engage in cross-border activity. Thus, when trade procedures are less time-consuming and burdensome, domestic firms become more competitive, which enables them to access and participate efficiently in international trade. For instance, in the study by Minor and Tsigas (2008) where they tested the effects of reducing time to export for SSA by 50% on the composition of exports and on the markets to which SSA exports, their findings revealed that reducing delays associated with exports increased higher value-added products' share of exports. Specifically, in Ethiopia, Eifert and Ramachandran (2004) revealed that reducing the number of days required for customs clearance by half could lead to up to 18% increase in firms' productivity. In a study by Bensassi and Jarreau (2019) on the level and frequency of bribe payments in informal cross-border trade in West Africa (i.e., trade between Benin and its West African partners), the authors found that trade facilitation helped to lower bribes, hence corruption among the trading partners. This means that failure to implement trade facilitation measures can lead to higher trade costs, making it more expensive for businesses to import and export goods, thereby reducing competitiveness and profitability which may discourage firms from trading internationally.

*Lost opportunities for development*: Inefficient customs procedures may be costly at the national and corporate levels. At the national level, the costs may involve smuggling and corruption. Then, at the firm level, the costs may be associated with slow and unpredictable goods delivery and other direct costs in rent payments and compliance with cumbersome customs procedures. There may also be opportunity costs regarding foregone business opportunities and the need to hold excessively high stock levels (Engman, 2005), which may be costly to existing businesses and possibly deter potential new firms. This can be detrimental in developing countries, where trade can significantly reduce poverty and improve living standards. Meanwhile, trade facilitation measures can help increase market access and facilitate the flow of goods and services. In Bresnahan et al. (2016), the authors revealed how export status and productivity of firms in Ghana, Kenya, and Tanzania were positively correlated during the 1990s and early 2000s, where there was increased trade liberalisation in the sub-region. Also, successful implementation of trade facilitation measures can be an avenue to generate revenue for the government; in that, as customs

processes are modernised, the resulting efficient customs operation may raise customs productivity and facilitate tax collection, reducing revenue leakages from smugglers and corrupt activities at the ports (Engman, 2005). Businesses in turn may benefit from the reduction in TTCs and enhance predictability of customs procedures.

Other benefits from the implementation of trade facilitation measures include promotion/facilitation of economic integration in the region, and global chain integration.

*Economic integration*: Implementation of trade facilitation measures is directly linked to increased intra-regional trade, and in Africa, a study by the World Bank corroborated this assertion by estimating that 10% reduction in trade costs could lead to a 10% increase in intra-regional trade (World Bank, 2020). In fact, in 2015, the top ten countries with the highest levels of trade facilitation, as measured by the WTO's Trade Facilitation Indicator, had an average intra-regional trade share of 37% (Teh et al., 2016). Similarly, in 2020, the top ten economies with the highest scores on the report's "trading across borders" indicator, which reflects the ease of trading across borders, had an average intra-regional trade share of 37%. In comparison, the bottom ten economies had an average intra-regional trade share of just 15% (World Bank, 2020). Therefore, we argue that trade facilitation can be a channel for increased economic integration which can foster cooperation among countries and reduce regional conflicts, with further indirect benefits related to poverty alleviation, control of inflation, and reduction in unemployment (Yang & Gupta, 2007; Le Goff & Singh, 2014; Anyanwu, 2014). For instance, there is empirical evidence on how regional trade agreements have contributed to regional stability and security; an example is ECOWAS' role in resolving the conflicts in Sierra Leone, which led to a successful democratic election in 2003 (Yang & Gupta, 2007).

*Global value chain integration*: This refers to integrating firms and countries into global production networks, in which firms in different countries specialise in different stages of production and trade intermediate goods and services. Trade facilitation measures can therefore facilitate global value chain integration by reducing the costs and risks associated with international trade and making it easier for firms to participate in global value chains. This can help increase firms' competitiveness in global markets, leading to knowledge and skill sharing which may further promote economic growth and development. A study by the United Nations Conference on Trade and Development (UNCTAD) found that trade facilitation measures can help to increase global value chain integration in developing countries. The study found that countries with high levels of trade facilitation have higher levels of participation in global value chains and that trade facilitation measures can help increase firms' competitiveness in global markets (UNCTAD, 2019).

## 24.5 Stylised Facts of Trade Facilitation in Africa

Africa is home to about 47 regional trade agreements, of which the core principle of many of these agreements is to facilitate trade in the region through the creation of larger markets that will enable the businesses in the region to enjoy economies of scale and competitiveness and attract foreign direct investment (Yang & Gupta, 2007). What are the characteristics of cross-border trade in the region in response to these initiatives? Therefore, the current section provides some insights into stylised facts about regional cross-border trade. The stylised facts discussed here are built on how trade facilitation indicators relate to trade flows. Therefore, following a related study by Seck (2016), the indicators include time and costs to trade, costs associated with business startup procedures, Internet usage, and a logistic performance index.

First, cross-border trade within and across the continent is extremely costly, driven mostly by the indirect cost component, with substantial variations among regional economic communities (RECs), making border processes inefficient in many countries. Table 24.1 presents average estimates of selected border and transport efficiency indicators for some regional RECs. Indeed, SSA is second only to South Asia in the regions with the highest numbers of documents required for export and import (8 and 9, respectively, between 2006 and 2015). Exporting or importing takes over 30 days (see Table 24.1). Customs clearance times are very important in attracting foreign direct investment (Eifert & Ramachandran, 2004; Dollar et al., 2003) because inefficient customs and border procedures lead to trade transaction costs, which are very costly for certain goods, such as perishable goods. Apart from the fact that the average times to export and import in SSA (33 days and 40 days, respectively) are high relative to other regions of the world, there appear to be substantial variations among the RECs. For instance, the time to export in ECCAS and IGAD member countries is about 8 and 6 days, respectively, more than the corresponding SSA average (Table 24.1).

**Table 24.1** Average border and transport efficiency indicators by region (2006–2015)

| *Regional economic community* | *Documents to export (number)* | *Time to export (days)* | *Cost to export (US$ per container, deflated)* | *Documents to import (number)* | *Time to import (days)* | *Cost to import (US$ per container, deflated)* |
|---|---|---|---|---|---|---|
| CEN-SAD | 8 | 35.9 | 2721.6 | 9 | 43.7 | 3371.5 |
| COMESA | 8 | 35.9 | 3248.0 | 9 | 43.0 | 4432.1 |
| EAC | 8 | 34.8 | 3691.6 | 11 | 45.7 | 4833.2 |
| ECCAS | 8 | 41.7 | 3600.4 | 10 | 51.9 | 4660.5 |
| ECOWAS | 7 | 28.5 | 1866.5 | 9 | 34.4 | 2439.4 |
| IGAD | 8 | 39.8 | 4268.3 | 10 | 45.9 | 5219.6 |
| SADC | 7 | 32.0 | 2575.4 | 8 | 37.3 | 3185.3 |
| Sub-Sahara Africa | 8 | 33.4 | 2699.7 | 9 | 40 | 3414.30 |

Meanwhile, the time to trade is slightly better within the ECOWAS region when compared to the SSA average. Intra-regional trade will record significant volume and value improvements if trade can move without hindrance in the region, as is depicted in the top panel of Fig. 24.5. Thus, countries with lower costs and time to trade are associated with higher trade value and volume, respectively.

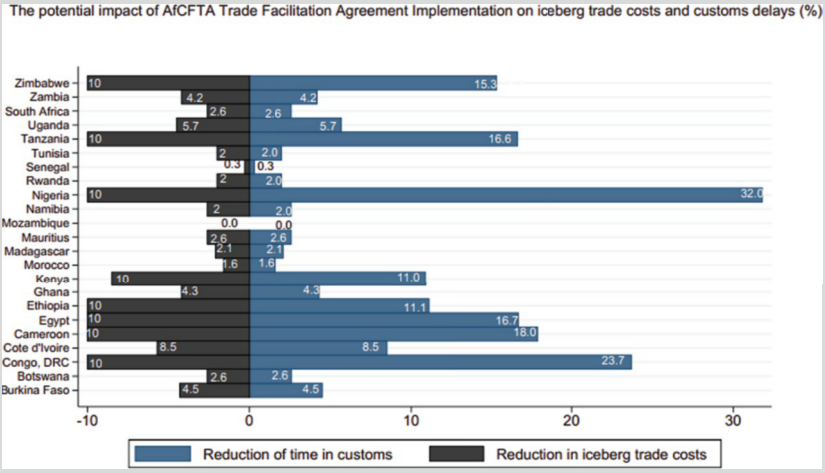
Second, regulations are important to ensure standards that can benefit a country's competitiveness; when the procedures involved are cumbersome, time-, and resource-consuming, they increase the indirect costs associated with business activities. The middle panel of Fig. 24.5 shows a negative relationship between Africa's regulatory environment (costs and procedures, respectively) and trade flow (value and volume, respectively). In countries where businesses go through a simple and inexpensive procedure to register with authorities, doing business becomes easier and relatively less costly, promoting trade. Despite significant progress by African countries in making business registration and licence acquisition easier, data show a negative relationship between the regulatory environment (costs and procedures, respectively) and trade flow (value and volume, respectively) in Africa, with many countries clustered below the average, implying that trade in Africa is hampered by the complex procedures involved in registration. This may explain why most African countries are ranked worse (over 100th out of the 190 countries in the World Bank's Doing Business dataset), contributing to the region's poor rank relative to the global rank on starting a business, such as business costs associated with the weak regulatory environment on issues concerning government approvals for acquiring export licences, construction permits, and electricity connections.

Third, the Internet contributes to improvement in communication by making it cheaper and thereby stimulating trade by reducing costs associated with communication and geographical distance. It also plays a significant role by bringing countries closer, which can lead to the development of the global value chain and intra-industry trade.[2] Other market-specific sunk costs of trading may also be reduced (Seck, 2016). Now, even though SSA recorded the "world's fastest rate of new broadband connections between 2008 and 2015" and mobile data traffic was projected to increase by seven times between 2017 and 2022 (Leke et al., 2019), the region is still facing a significant digital-skills deficit such that 12 out of 20 countries with the weakest digital skills are in Africa, and the digital skill gap index for the region, averaging 1.8, is below the global average of 6 (Dupoux et al., 2023). This notwithstanding, countries with high Internet usage among their population have high trade flows, and vice versa, as depicted in Fig. 24.5. For example, as of 2020, Internet usage was only about 6% of Uganda's population, and trade (exports and imports of goods and services) was just 37% of GDP. Meanwhile, for the same period in

[2] https://www.tralac.org/blog/article/14540-understanding-africa-s-place-in-regionalised-global-trade.html

## Box 24.3 The Cost and Benefits of Trade Facilitation Measures

**(a)**




**(b)**

**The effect of 1 Percent change of Trade Facilitation and Tariff Barrier Measures on Trade flow**

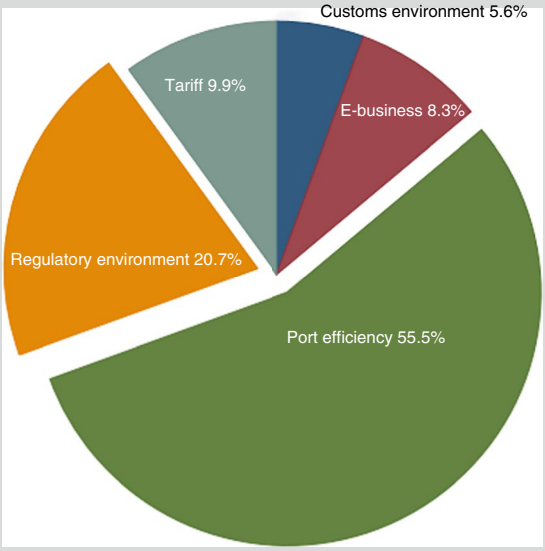



**Fig. 24.5** (**a**) The impact of implementing Trade Facilitation Agreement on iceberg transport costs and customs delay. (Source: World Bank, 2020), (**b**) The effect of 1% change in trade facilitation and tariff barriers on trade flows. (Source: Wilson et al., 2003)

Seychelles, where Internet usage among the population was 79% trade constituted 135% of the GDP (Fig. 24.6).[3]

Finally, efficient and effective management of logistics performance has great potential for trade by making a country more competitive through the effects on costs of international trade, and the literature on the positive effect of logistics performance on trade volume is vast (see, e.g., Bugarčić et al., 2020; Shepherd, 2016; Bensassi et al., 2015; Martí et al., 2014; Wilson et al., 2005).

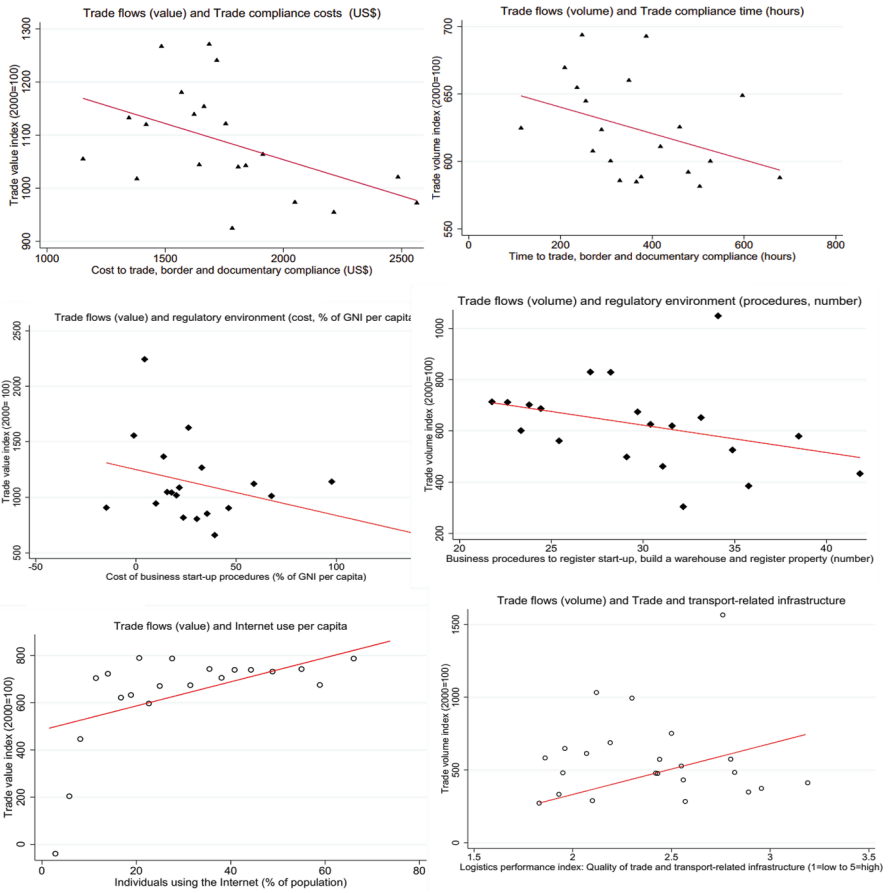

Trade flows (value) and Trade compliance costs (US$)
Trade value index (2000=100)
Cost to trade, border and documentary compliance (US$)
Trade flows (volume) and Trade compliance time (hours)
Trade volume index (2000=100)
Time to trade, border and documentary compliance (hours)
Trade flows (value) and regulatory environment (cost, % of GNI per capita
Trade value index (2000= 100)
Cost of business start-up procedures (% of GNI per capita)
Trade flows (volume) and regulatory environment (procedures, number)
Trade volume index (2000=100)
Business procedures to register start-up, build a warehouse and register property (number)
Trade flows (value) and Internet use per capita
Trade value index (2000=100)
Individuals using the Internet (% of population)
Trade flows (volume) and Trade and transport-related infrastructure
Trade volume index (2000=100)
Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)

**Fig. 24.6** Stylised facts on trade flows and a wide range of trade facilitation indicators for selected African economies. (Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo, DRC, Congo, Rep, Cote D'Ivoire, Ethiopia, Egypt, Kenya, Lesotho, Mauritius, Morocco, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe; Date Source: World Bank [2022] 'Doing Business' Trading across borders)

[3]WDI (2020 estimates).

Consequently, from Fig. 24.5, there is a positive relationship between the logistic performance index (measured by the quality of trade and transport-related infrastructure) and the volume of trade among the African countries that comprise the sample. This corroborates studies such as Marti et al.'s (2014), which revealed that improvement in any component of the logistic performance index is associated with growth in international trade, even in Africa.

## 24.6 Critical Assessment of the Trade Facilitation Agreements (TFA)

The World Trade Organisation and the African Continental Free Trade Agreements' Trade Facilitation Agreement (TFA) are multilateral and plurilateral agreements aiming to reduce international trade costs by simplifying and standardising customs procedures and other regulatory processes. The articles of the TFA address a range of issues broadly classified into seven categories, as illustrated in Table 24.2 and discussed below.

### *24.6.1 Part I. Transparency*

*Publication and Availability of Information:* This article requires member countries to make information on their customs procedures and requirements publicly available and easily accessible to traders. This is an important provision as it ensures that traders have access to accurate and up-to-date information on the rules and regulations they must follow when importing and exporting goods. However, it is important that the information provided is clear and concise and regularly updated to reflect any changes or updates to customs procedures.

*Prior Publication and Consultation:* This article requires member countries to consult with traders and other relevant stakeholders before introducing new customs procedures or changing existing ones. This helps to ensure that the needs and concerns of traders are considered and allows them to prepare for any changes that may affect their business. However, it is important that these consultations are meaningful and that traders' views are given due consideration.

*Advanced Ruling*: This article allows traders to request an advance ruling from the customs authorities of a WTO/AfCFTA member country on how a specific good will be treated under that country's customs laws and regulations. This helps traders plan their operations and minimises the risk of unexpected delays or penalties at the border. However, it is important that these advanced rulings are provided promptly and that the request process is straightforward and accessible to all traders.

*Appeal or Review Procedures:* This article gives traders the right to appeal or request a review of any decisions or actions taken by customs authorities that they believe are incorrect or unjust. This is an important provision as it helps to ensure that traders have a mechanism for addressing any issues or concerns they may have with customs authorities. However, it is important that these appeal

**Table 24.2** Trade Facilitation Articles in the World Trade Organization and the African continental free trade agreements

| | *WTO TFA* | *AfCTA TFA* |
|---|---|---|
| *Part I. Transparency* | | |
| Publication and availability of information | Article 1 | Articles 4, 5 |
| Opportunity to comment, information before entry into force, and consultations | Article 2 | Nil |
| Advance rulings | Article 3 | Article 6 |
| Review and appeal | Article 4 | Article 22 |
| *Part II. Fees and formalities* | | |
| Fees, charges, and penalties | Article 6 | Article 21 |
| Release and clearance of goods | Article 7 | Articles 7–15 |
| Border agency cooperation | Article 8 | Article 25 |
| Movement of goods intended for import under customs control (domestic transit) | Article 9 | Nil |
| Formalities connected with importation, exportation, and transit | Article 10 | Articles 16–18, 20, 23–24 |
| *Part III. Transit* | | |
| Freedom of transit | Article 11 | Article 19 |
| *Part IV. Customs and other forms of trade facilitation cooperation* | | |
| Customs cooperation | Article 12 | Article 26 |
| *Part V. Customs union specific* | | |
| Implementation | Articles 13–19 | Article 29 |
| Dispute settlement | Article 20 | Article 30 |
| *Part VI. Technical assistance and capacity building* | | |
| Technical assistance and capacity building | Articles 21–22 | Nil |
| *Part VII. Institutional arrangements* | | |
| Institutional arrangements | Article 23 | Articles 27–28 |

Notes: The Trade Facilitation Articles in both the WTO and ACFTA are fairly similar except for the opportunity to comment, on information before entry into force, domestic transit and technical assistance, where the WTO's is more comprehensive

and review procedures are fair, transparent, and unbiased and that traders provide adequate support and guidance throughout the process.

*Other Measures to Enhance Impartiality, Non-Discrimination, and Transparency*: This article requires member countries to ensure that their customs procedures are impartial, non-discriminatory, and transparent. This is an important provision as it helps to ensure that all traders are treated equally and fairly and that the customs process is transparent. However, these measures must be effectively implemented and monitored to ensure that they effectively achieve their intended goals.

### *24.6.2 Part II. Fees and Formalities*

*Disciplines on Fees and Charges Imposed on or in Connection with Importation and Exportation:* This article sets out disciplines on the fees and charges that WTO/AfCFTA member countries can impose on traders concerning the

importation and exportation of goods. This is an important provision as it helps to ensure that traders are not unduly burdened by excessive charges, which can impede trade and undermine the overall efficiency of the customs process. However, it is important that the charges imposed are reasonable and justified and that they do not discriminate against certain types of traders or goods.

*Release and Clearance of Goods:* This article sets out provisions for the prompt release and clearance of goods at the border. This is an important provision as it helps ensure that the customs process is efficient and that traders can get their goods to market in a timely manner. However, it is important that customs authorities have the resources and infrastructure to carry out this process effectively and do not unduly delay the release and clearance of goods.

*Border Agency Cooperation:* This article requires member countries to cooperate to facilitate the smooth and efficient flow of goods across borders. This is an important provision as it helps to ensure that customs authorities can effectively coordinate their efforts and share information, which can help reduce delays and improve the overall efficiency of the customs process. However, it is important that this cooperation is based on mutual trust and respect and does not unduly restrict the ability of countries to regulate their borders.

*Movement of Goods Intended for Import Under Customs Control: (Declaration of Transshipped or in Transit Goods) (Domestic Transit):* This article provides a specific set of rules for the declaration of transshipped or in-transit goods, which are goods shipped from one country to another through a third country. This is an important provision as it helps to ensure that these goods are accurately declared and that customs authorities can effectively track their movement and monitor compliance with relevant rules and regulations. However, it is important that the rules for declaring transshipped or in-transit goods are manageable, and that they do not unduly restrict trade.

*Formalities Connected with Importation and Exportation and Transit:* This article requires member countries to simplify and streamline the formalities associated with the importation, exportation, and transit of goods. This is an important provision as it helps to reduce the administrative burden on traders and improve the overall efficiency of the customs process. However, these formalities must be allowed, as they are necessary to ensure compliance with relevant rules and regulations and protect the integrity of the customs process.

### *24.6.3 Part III. Transit*

*Freedom of Transit:* This article guarantees the freedom to transit goods across the territories of WTO/AfCFTA member countries. This is an important provision as it helps to ensure that traders can move their goods freely and efficiently across borders, which can help to reduce costs and improve the overall competitiveness of global trade. However, it is important that this freedom of transit is balanced with the need to protect the security and sovereignty of countries and that it does not undermine the ability of countries to regulate their borders.

### *24.6.4 Part IV. Customs and Other Forms of Trade Facilitation Cooperation*

*Customs Cooperation:* This article requires WTO member countries to cooperate to facilitate the smooth and efficient flow of goods across borders. This is an important provision as it ensures that customs authorities can effectively coordinate their efforts and share information, which can reduce delays and improve the overall efficiency of the customs process. However, it is important that this cooperation is based on mutual trust and respect and that it does not unduly restrict the ability of countries to regulate their borders.

### *24.6.5 Part VI. Technical Assistance and Capacity Building*

*National Committee on Trade Facilitation:* This article requires member countries to establish a National Committee on Trade Facilitation (NCTF) to coordinate and oversee the implementation and monitoring of the TFA at the national level. This is an important provision as it helps to ensure that the TFA is effectively implemented and that its provisions are properly enforced. However, it is important that the NCTFs represent the diverse interests of traders and other stakeholders within each country and that they are transparent and accountable in their decision-making processes. It is also important that the NCTFs have the necessary resources and expertise to carry out their responsibilities effectively.

### *24.6.6 Part VII. Institutional Arrangements*

*Institutional Arrangements:* This article establishes the institutional arrangements for implementing and monitoring the TFA. This includes the creation of a Committee on Trade Facilitation, which is responsible for overseeing the implementation and monitoring of the TFA and providing guidance to member countries on its provisions. This is an important provision as it helps to ensure that the TFA is effectively implemented and that its provisions are properly enforced. However, it is important that the Committee on Trade Facilitation is transparent and accountable in its decision-making processes and that it is representative of the diverse interests of member countries.

### *24.6.7 Criticism of Trade Facilitation Agreements (TFA)*

Like any international agreement, the World Trade Organization Trade Facilitation Agreement (TFA) has faced criticism from some quarters. One criticism of the TFA is that it does not adequately address the needs of developing countries. Some argue that the TFA does not provide sufficient assistance to developing countries to help them implement the provisions of the agreement, which could make it difficult for these countries to realise the full benefits of the agreement. There have also been concerns raised about the dispute settlement provisions of the TFA. Some argue that the provisions of the TFA

do not provide adequate protections for the interests of developing countries, and that they could be used to challenge the regulatory policies of these countries. Despite the laudable intentions of the Trade Facilitation Agreement (TFA), some developing economies have raised several criticisms, especially concerning their capacity to implement the agreement and the potential impact on their domestic industries:

*Capacity Constraints*: Many developing economies need more institutional capacity and technical expertise to fully implement the TFA, notably regarding customs procedures and electronic commerce, and some argue that these constraints could limit their ability to take advantage of the agreement's benefits, particularly in reducing trade costs and boosting competitiveness.

*Costs of Implementation*: Implementing the TFA could also be costly for developing economies, especially regarding provisions concerning upgrading infrastructure, implementing new procedures, and providing technical assistance to smaller businesses. Funding these costs could be challenging for economically constrained economies with competing development priorities.

*Crowding out Domestic Industries*: Some developing economies are concerned that the TFA could negatively affect their domestic industries, particularly in sectors with a comparative advantage. For instance, removing certain non-tariff barriers could cause increased competition from foreign producers, harming domestic industries' competitiveness.

*Technical Assistance and Support*: While the TFA includes provisions for technical assistance and capacity building for developing economies, some critics argue these provisions may need to be revised to properly address the needs of these economies. Developed economies may need to provide technical support to developing economies to enable them to implement the agreement effectively.

*Fairness and Imbalance*: There are further concerns among developing economies about the biases of the TFA towards developed economies, specifically regarding the resources and technical assistance provided to implement the agreement. Critics argue that the unfettered implementation of these agreements could create an uneven playing field that disadvantages developing economies in global trade.

## 24.7 Conclusion and Recommendations

Trade facilitation measures are a key policy driver of export competitiveness, trade flows, and economic welfare. Therefore, this chapter provided a conceptual review and empirical facts on trade facilitation—broadly referring to the simplification and standardisation of trade procedures and regulations to reduce trade costs and increase efficiency in the flow of goods and services across borders—in Africa.

Conceptualising and measuring trade facilitation can be challenging because of the complex and multifaceted nature of the concept. Researchers have used various approaches to measure trade facilitation, including index-based and

structural equation modelling. The costs and benefits of trade facilitation depend on various factors, including the level of trade openness, the quality of trade infrastructure, and the level of economic development. The benefits of implementing trade facilitation measures outweigh the costs of status-quo, particularly for developing countries in Africa that often experience significant trade barriers. Some potential trade facilitation benefits include economic growth through increase in exports with further benefits related to declines in poverty and unemployment; increased competitiveness, opportunities, and profitability of businesses; global-value chain integration and economic integration. There are several stylised facts about trade facilitation in Africa. For instance, trade facilitation is often found to be inversely correlated with border and documentary compliance, regulatory environment and positively correlated with information and communication infrastructure, and quality of trade and transport-related infrastructure. In addition, trade facilitation is often associated with improved trade logistics and infrastructure and increased transparency and predictability in trade procedures.

Trade facilitation agreements, such as the African Continental Free Trade Area and World Trade Organization Trade Facilitation Agreements, can enhance trade flows by establishing clear regulatory standards and procedures for customs and other trade-related processes. However, it is important to weigh the potential costs and benefits of such agreements and the implementation challenges to maximise their effectiveness. Factors that may affect the effectiveness of trade facilitation agreements include the level of political commitment, governments' capacity to implement the agreements' provisions, and stakeholders' involvement in the design and implementation process.

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CHAPTER 25

# Curbing IFFs Through Trade Mis-invoicing and Transfer Mispricing in Africa

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## 25.1 Introduction

The term "Illicit Financial Flows" (IFFs) was birthed in the early 1990s and rose to prominence in the middle of the 2000s. Global interest in IFFs crested between September 2016 and May 2017, coinciding with the China and Germany G20 summit. This was due to the fact that research, such as that conducted by the High Level Panel on African countries, revealed that IFFs are prevalent in resource-rich developing countries and impede their development. In developing countries, IFFs have posed a significant obstacle, impeding the ability of governments to generate the necessary tax revenue and thereby undermining growth and development. It is also essential to note that IFFs have had negative welfare and distributional effects on the majority of the impoverished in a number of African nations, which has exacerbated income inequality and undermined employment prospects. Due to limited resources to

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3_25

finance investment and industrial expansion, unemployment rates have remained extremely high in the majority of developing nations (Ndung'u, 2007; Abor, 2014). According to the UN High Level Panel Report, Africa lost USD 50 billion annually due to IFFs.

The inclusion of Illicit Financial Flows (IFFs) within the framework of the Sustainable Development Goals (SDGs) signifies their potential harm not just to poor nations or economies, but to the global community as a whole. Goal 16 (16.4) articulates the objective of reducing illicit financial and weapons flows, enhancing the retrieval and restitution of unlawfully acquired assets, and addressing various manifestations of organised criminal activities by the year 2030. The concept and definition of illicit financial flows (IFFs) lack unanimity among scholars, as noted by Musselli and Bonanomi (2020). However, it is worth mentioning that several nations have committed to a significant reduction of IFFs by 2030, aligning with the objective 16.4 of the Sustainable Development Goals (SDGs). According to the World Bank (2017) and Global Financial Integrity (GFI) (2021), the term "Illicit Financial Flows" (IFFs) refers to financial transactions that occur at an international level and is associated with criminal acts or the generation, transfer, or management of illicit income (World Bank, 2017). Due to their extensive operational scope, Illicit Financial Flows (IFFs) provide a considerable difficulty due to their inherent complexity and limited controllability. Numerous organisations and initiatives are dedicated to mitigating diverse facets of illicit financial flows (IFFs), and scholarly discourse has underscored the need of international collaboration in the prevention of IFFs (Montes, 2020).

IFFs can be routed through two channels. The residual model of the World Bank captures the initial route by which illicit capital departs a country, namely, its external accounts. The World Bank Residual model contrasts a country's recorded sources and uses of funds. According to the model, whenever a country's source of funds exceeds its recorded use of funds, the difference represents capital outflows that are unaccounted for and therefore illicit. The trade mis-invoicing model, which employs IMF Direction of Trade Statistics (Kar & Cartwright-Smith, 2008), captures the second type of IFFs, which are caused by the mispricing of trade transactions. A significant source of leakage is IFFs due to mispricing of commerce between unrelated parties and within multinational corporations. Tax Justice Network (2010) estimates that the amount of money that the world's poorest countries lose due to discriminatory transfer pricing schemes exceeds the amount of annual development aid they receive.

In this chapter, we examine the issue of IFFs, specifically, with respect to trade mis-invoicing and transfer mispricing in Africa and how to curb them. The rest of the chapter is structured as follows: Sect. 25.2 provides an overview of IFFs; Sect. 25.3 introduces trade mis-invoicing, while Sect. 25.4 details how to measure trade mis-invoicing. Section 25.5 then describes transfer mispricing and indicates the methods of measuring it. This is followed by Sect. 25.6 which presents the situation of IFFs in Africa's extractives and Sect. 25.7 details the

effects of IFFs on Africa's development. Section 25.8 suggests ways of curbing IFFs in trade mis-invoicing and transfer mispricing, whilst Sect. 25.9 concludes.

## 25.2 Overview of Illicit Financial Flows (IFFs)

There is no unified, universally acknowledged definition of IFFs. The expansive definition of the term "illegal" is one of the contributing factors. Unlawful money transfers that are still prohibited by "rules or traditions"—which may include those that are reprehensible or immoral on a social and/or ethical level—are not necessarily unlawful.

The most common working definitions of IFFs centre on the fundamental concept of transnational financial transactions that are in some way connected to illegal activities (Table 25.1).

Therefore, it is evident that the term IFFs lacks a precise definition, but can be identified in the literature as flows from activities such as concealing the proceeds of crime, drug trafficking, and embezzlement; routing funds to illicit destinations; activities such as bribery or terrorism; misreporting transactions to avoid tariffs or taxes; and capital flight in defiance of currency regulations. Similar to the definitions or explanations of IFFs are their legality or illegality, source of funds, transfer mechanism, and potential uses.

This lack of consensus makes it challenging, if not impossible, to construct surveillance and evaluation procedures. In addition, there are well-known disagreements and conflicts regarding the methodologies used to estimate the volume of IFFs. In part, the difficulties stem from a persistent lack of conceptual clarity, but given the unlawful nature of the movements, it will be difficult for any estimation method to represent the phenomenon accurately. Even if a definition is agreed upon, it remains unclear whether it makes sense to aggregate estimates of various categories of IFFs.

Cobham and Loretz (2014) identifies four motivationally distinct components of IFF in his extensive taxonomy: market/regulatory abuse, tax abuse, power abuse including the plunder of state funds and assets, and criminal proceeds.

IFFs can be as simple as a single individual transferring currency into private accounts overseas without paying taxes or as complex as criminal networks establishing multilayered, multijurisdictional institutions to conceal ownership.

## 25.3 Overview of Trade Mis-invoicing

Trade mis-invoicing is a deliberate manipulation of the quantities and prices of export and import commodities to either over or under state their true values. The GFI comprehensively sees trade mis-invoicing as "a way of illegally transferring money across borders that involves the intentional misrepresentation of the value, volume, and/or kind of commodity in an international commercial transaction involving products or services by at least one party to the transaction".

**Table 25.1** Samples of working definitions

| *Source* | *Title* | *Working definitions* |
|---|---|---|
| African Tax Administrators Forum | Illicit Financial Flows and Trade Mis-Invoicing | Any money that is illegally earned, transferred, or utilised. |
| Global Financial Integrity (2017) | Illicit Financial Flows from Developing Countries: 2004–2013 | Funds crossing borders [that] are illegally earned, transferred, and/or utilised. |
| UNECA (2015) | High Level Panel on Illicit Financial Flows from Africa (2015) | Money illegally earned, transferred, or used. |
| Inter-Agency Task Force on Financing for Development | Inter-Agency Task Force on Financing for Development | There are… some parameters that members of the Task Force agreed on, namely: (i) illicit financial flows constitute money that is illegally earned, transferred, or used and (ii) that crosses borders. |
| OECD (2014b) | Illicit Financial Flows from Developing Countries | There are a number of definitions for illicit financial flows, but essentially they are the result of methods, practises, and offences designed to transfer capital out of a country in violation of national or international law. |
| United Nations | Coherent Policies for Combatting Illicit Financial Flows | IFFs are defined broadly as all cross-border financial transfers, which contravene national or international laws. |
| United Nations | World Economic Situation and Prospects | There is no universally accepted definition of illicit financial flows (IFFs), but the term is commonly used to refer to three distinct types of IFFs: the proceeds of commercial tax evasion, revenues from criminal activities, and public corruption. |
| World Bank (2016) | The World Bank Group's Response to Illicit Financial Flows: A Stocktaking | Generally refers to the cross-border movement of capital related with illicit conduct, or more specifically, money obtained, transferred, or utilised unlawfully that crosses borders. |

Source: Authors compilation based on definitions in the literature

Historically the practice of falsifying the value of commodities and their respective prices is as old as the beginning of trade. The earliest forms saw petty traders within their localities under declare the values of their commodities so they would be exempted from paying local levies and taxes. Over time this activity has become a grand scheme orchestrated by different business cartels and networks to fraudulently disguise their movement of funds across different jurisdictions. Today, global attention has heightened on the activity because albeit using different methodologies, the GFI, IMF, World Bank, OECD, and UNCTAD have adduced unequivocal evidence from analysing international mirror trade data that mis-invoicing forms the biggest component of global trade-related illicit financial flows.

In the case of Africa, a collaboration between the African Union (AU) and the United Nations Economic Commission for Africa (UNECA) established same evidence noting importantly the substantial amount of capital that the biggest economies of the continent South Africa, Nigeria, Morocco, and Egypt are losing to mis-invoicing annually. They emphasised the vulnerability and risks that characterise international trade of African countries in general as far as their susceptibility to mis-invoicing is concerned. In China, for instance, firms strategically used overpayment of imports to manoeuvre their way around the country's strict currency control system. It was also uncovered that inflated import invoices were used to purchase cheap dollars from the official currency control agency in Venezuela. Papua New Guinea is known for its trade in tropical hardwoods, the export values of these woods were revealed to have been mostly under declared. Indeed, the act has become the most viable conduit to launder money.

A myriad of factors are known to drive trade mis-invoicing, principal among such factors are macroeconomic issues such as interest rate differentials, exchange rate regime, currency controls, tax policies, and generally poor economic conditions. Political instability and corruption are equally big contributors.

Trade mis-invoicing has been primarily justified on two broad grounds. Firstly, when firms are charged high VAT rates or import duties, such firms are incentivised to deliberately under declare the true value of their imports so as to pay less charges. Secondly, investors fear of being expropriated due to the uncertain effects of unsound economic policy and political instability; mis-invoicing is used as conduit for illegal capital flight.

Basically, mis-invoicing is categorised into two types—over invoicing and under invoicing. These are used under different circumstances. The agenda that the exporter or the importer seeks to achieve determines which one is chosen. As the World Customs Organisation (WCO, 2018) appropriately captured, "the over valuation of exports or under-valuation of imports are intended to incorporate illicit proceeds into domestic financial accounts".

**Over invoicing:** where the declared value of the quantities and prices of the imports or exports are more than the actual value. For instance, importers could use over invoicing of imports as a means to gain access to greater foreign exchange than they actually need. According to the world customs organisation, "Over-valuation of imports could as well be intended to disguise capital flight as a form of trade payment".

**Under invoicing:** where the declared value of the quantities and prices of the imports or exports are less than the actual value. For example, a firm can under invoice its exports so as to move capital out of a country, thus more commodities are exported yet only small payments are received into the country. Effectively the foreign exchange getting into the country is reduced. The world customs organisation is again of the view that "under valuation of exports can be intended to conceal trade profit abroad, i.e. tax havens".

**Table 25.2** Forms of trade mis-invoicing

| | *Overstatement/overvaluation* | *Understatement/undervaluation* |
|---|---|---|
| Import | Outflow<br>a. Capital flight and profit shifting | Inflow<br>a. Capital flight and profit shifting<br>b. Tariff, non-tariff measures and indirect tax avoidance |
| Export | Inflow<br>a. Capital flight and profit shifting<br>b. Indirect tax rebates and export subsidies | Outflow<br>a. Capital flight and profit shifting |

Source: Spanjers (2017)

In Table 25.2, tabulates an example by which over or under invoicing of imports and exports can be used to induce the flow of capital into or out of a particular jurisdiction.

### *25.3.1 Capital Flight and Profit Shifting*

A move of money/capital from one jurisdiction to another is one of the most commonly mentioned reasons for trade mis-invoicing. In the case of strong capital controls, expatriation of money or capital flight, whether unlawful in and of themselves or not, is the fundamental reason.[1] In instances when capital controls are not necessarily the primary cause, merchants utilise international transactions to reduce direct tax obligation by channelling money flows to the jurisdiction with the lowest direct tax rates. The overall impact is the same, however capital leaves the nation, depriving the government of direct tax income and exerting downward pressure on the local currency (Kravchenko, 2018; Egbulonu & Bhattarai, 2020).

### *25.3.2 Tariff, Non-tariff Measures, and Indirect Tax Avoidance*

Non-tariff measures are typically defined as policy measures other than customs tariffs that have the potential to have an economic impact on international trade in products by altering traded quantities, prices, or both. The avoidance of tariffs, non-tariff measures, and indirect taxes is the other main source of trade mis-invoicing. As the importance of tariffs declines, the use of trade mis-invoicing to circumvent non-tariff measures (NTMs) has become a major issue. Tariffs and non-tariff measures were discovered to be equivalent, and exporters or commodities with higher ad valorem equivalents (AVEs) are apt to have greater trade disparities. This suggests that enterprises mis-declare product codes or country of origin to avoid the burdensome and opaque NTMs (Nicita & Gourdon, 2013).

[1] Kravchenko, A. (2018). Where and how to dodge taxes and shift money abroad using trade misinvoicing: a beginner's guide.

### *25.3.3 Indirect Tax Rebates and Export Subsidies*

While indirect taxes such as tariffs and the goods and services tax are typically down in the region as a result of liberalisation attempts, trade tax revenue has declined significantly more throughout the 1990s. For this reason, governments have increased taxes on products and services (VAT and GST). These duties have increased from less than a fifth of indirect taxes to more than half of indirect taxes since 1990. However, the goods and services tax is vulnerable to fraud as well. In addition to attempting to limit import values, as previously mentioned, there are also incentives to over-invoice exports in order to receive GST rebates for products not consumed within a country's borders.

## 25.4 Measuring Trade Mis-invoicing

There is no recognised metric of trade mis-invoicing, although most academics generate quantitative estimates of trade mis-invoicing using aggregate (macro) trade data. These macro approaches strive to uncover abnormalities in aggregate trade data to infer plausible connections between these patterns and prospective trade mis-invoicing. The price filter method (PFM) and the partner country method (PCM) are two examples of such methods.

### *25.4.1 Partner Country Method (PCM)*

The PCM is based on the concept of the trade gap, which is defined as the difference in value between two parties' separately recorded international trade transactions. In order to illustrate what the trade gap measures in relation to trade mis-invoicing, it is necessary to analyse a hypothetical transaction between two parties.

*Illustration of Trade Gap*[9]

"Suppose a business in country A imports a particular volume of goods at a particular unit price from a business in country B. The importer in country A reports the value and volume of its import transaction with B to Customs officials in country A; similarly, the exporter in country B reports the value and volume of its export transaction to Customs officials in country B. If we denote the values (denominated in the same currency) for the transaction reported by the importer in country A by $\mathbf{V_A}$ and by the exporter in country B by $\mathbf{V_B}$, the trade gap between these 'mirror' reports of the same transaction is simply the arithmetic difference between the two values, or $\mathbf{V_A - V_B}$. Using the reported volumes and the unit prices implied (i.e., value divided by volume), the trade gap can be further expressed in terms of all the available data by

$$\mathbf{V_A - V_B = P_A^* Q_A - P_B^* Q_B}, \tag{25.1}$$

where the **Q**'s record the volumes (i.e., quantities) of trade reported by the partners in A and B for the transaction and the **P**'s record the unit values associated with the transaction. The trade gap in (Eq. 25.1) (in this case, an import gap) is the basic measurement underlying the PCM approach to estimating trade mis-invoicing".[2]

Historically, an arbitrary 10% allowance was made for transportation and insurance cost. However, in recent times, UNCTAD Trade Statistics has estimated various transportation and insurance costs for various commodities to improve the PCM methodology.

### *25.4.2 The Price Filter Method (PFM)*

The PFM is a bottom-up method that estimates a price filter for each commodity and uses it as a substitute for arm's-length pricing. The arm's-length price may be based on the commodity's price on the international market (free market prices) or the interquartile range method (a statistical technique). Estimates of trade mispricing are made when the unit price of a specific transaction differs from the typical prices predicted by a price filter. This is also referred to as excessive pricing.

With the free market price, the benchmarks/arm's-length price around which the price can vary are based on market/contract conditions, country-specific peculiarities, and sometimes transportation and insurance costs. Based on these conditions, upper and lower boundaries are set. Actual transactions are then compared with these prices and any transactions falling out of these prices are assumed to be mispriced.

Alternatively, with the interquartile range, upper and lower boundaries are set for the price variations in the transactions and any prices outside the upper or lower quartiles are assumed to be indicative of trade mispricing.

PFM's principal advantage is its utilisation of transaction-level data. This indicates that it operates efficiently and at a low cost. Initially, it may assist in the real-time, automatic monitoring of transactions, enabling the review of historical data. Moreover, PFM does not rely on the partner's transaction data; it can detect mispricing even in the case of collaboration between importer and exporter, which PCM would not detect.

One disadvantage of the interquartile range method of the PFM is that the statistical price filters will always detect transactions with abnormal pricing. Statistical price filters, for example, are constructed endogenously, that is, utilising all available transactions, even those with abnormally high prices. They are created by employing techniques such as the interquartile range. As a result, PFM will always detect transactions that fall outside the statistical filter. Another disadvantage is the lack of availability of international market prices of commodities that are used for the market price filter.

[2] WCO (2018).

The next disadvantage is the variability of products, even at the transaction level. Product classifications must be used to classify the transactions, and even at the most detailed level, they comprise items with varied degrees of heterogeneity. These would inherently have different prices, which would be identified as abnormal prices by the price filter, but this would not necessarily indicate mispricing (e.g., high-end quality products within the same product code would have high(er) prices, which could be identified as abnormal prices, despite the fact that they reflect the product's quality).

In addition, PFM is incapable of identifying legitimately unusual prices, such as lower prices offered by long-term contracts, and cases of volatile prices during the price filter estimation period, such as using annual price filters for crude oil in 2014 when monthly crude oil prices ranged from USD56/barrel to USD110/barrel (WCO, 2018). Similarly, if asserted prices differ marginally from actual prices, PFM will not mark them as irregular. Lastly, as with previous methods, it is challenging to identify inaccurate recording.

## 25.5 Overview of Transfer Mispricing

Transfer mispricing, also known as transfer pricing manipulation or fraudulent transfer pricing, refers to transactions conducted between related parties at prices intended to influence markets or deceive tax authorities. Transfer mispricing is abusive tax avoidance when entities artificially increase or decrease the price of commodities and/or services to transfer income and/or expenses between entities in order to avoid taxes (Government Accountability Office, 1992; Osei, 2010). Transfer pricing is more prevalent in developing nations due to the high volume of transactions between multinational corporations and their subsidiaries in developing nations. The majority of tax authorities consider the technique to be a form of tax deception or evasion. In most cases, when two unrelated businesses transact, a market price will result for the transaction. This transaction is referred to as "arms-length" because it is the result of an open market discussion. Generally, arm's-length pricing is accepted for tax purposes. However, when two related entities trade, they may attempt to manipulate the price at which the transaction is recorded in order to reduce their aggregate tax liability. This may allow the company to disclose as much of its earnings as possible in a tax refuge with minimal or no taxation.

Consider the hypothetical situation of Pee Limited, which manufactures rice in Ghana (West Africa) and then sells it in the United States. Pee Ltd's three companies do this: Vennis Ltd (in Africa), Haven Inc. (in a tax haven with no taxes), and LA Inc. (in the United States). Vennis Ltd is now selling product to Haven Inc. at an intentionally low price, resulting in artificially low profits and, as a consequence, an artificially low tax burden in Africa. Haven Inc. then sells the product to LA Inc. for approximately the same price as LA Inc. sells the processed product at the final retail price. As a result, LA Inc.'s profit margins and tax liabilities in the United States are excessively low. Haven Inc., on the other hand, has bought cheap and sold high, resulting in enormous profits that

are artificially manufactured. The corporation pays no taxes on its earnings since it is located in a tax haven.

This has not led to more efficient or cost-effective production, transportation, distribution, or retail procedures in the real world. Instead, Vennis Ltd. has artificially moved its income out of Africa and the United States and into a tax haven. As a result, tax funds were artificially diverted away from Ghanaian and American tax authorities, resulting in increased profits for the multinational. In light of this, underdeveloped nations are the most susceptible to transfer mispricing by multinational corporations, as their authorities may lack the necessary expertise and resources to investigate such situations.

### *25.5.1 Transfer Pricing Methods*

There are five main internationally recognised methods for determining the arm's-length price, and no single method is deemed appropriate in all situations. These procedures are based on UN, OECD, and American models. The taxpayer must select the method that provides the most accurate estimates of a transaction's arm's-length price. These transfer pricing methods rely directly or indirectly on the comparable profit, price, or margin information of transactions with comparable characteristics. This information may be an "internal comparable" based on analogous uncontrolled transactions between the entity and a third party, or it may be an "external comparable" involving independent businesses in the same market or industry. The five methods are (1) the comparable uncontrolled price method, (2) the resale price method, (3) the cost plus method, (4) the transactional net margin method, and (5) the transactional profit share method (see Osei, 2010).

*Comparable Uncontrolled Price Method*
The comparable uncontrolled price approach compares the price paid for similar property or services transferred in an uncontrolled transaction to evaluate if the price charged for property or services transferred in a regulated transaction is an arm's-length price. The taxpayer must establish that the items, contractual terms, and economic circumstances of the regulated transaction substantially reflect those of the uncontrolled transaction.

*Resale Price Method*
The resale price method compares the resale margin earned in comparable uncontrolled purchase and resale transactions to the resale margin earned by the purchaser of property or services in a controlled transaction from reselling the property or services in an uncontrolled transaction. The purchase price is set such that the reseller's margin will be enough to cover its operating and selling costs and produce a respectable profit. This approach entails subtracting the relevant total profit from the applicable resale price of the goods or services involved in the regulated transaction to arrive at an arm's-length price. The

relevant gross profit is obtained by multiplying the applicable resale price by the gross profit margin earned in comparable uncontrolled transactions.

*Cost Plus Method*
The cost plus method is determined by contrasting the markup on direct and indirect costs incurred in the delivery of goods or services in a regulated transaction to the markup on direct and indirect costs incurred in an equivalent uncontrolled transaction. By adding the controlled taxpayer's manufacturing expenses to the appropriate excess profit, this technique calculates an arm's-length price. The relevant gross profit is obtained by multiplying the controlled taxpayer's cost of producing the asset by the gross profit markup, expressed as a percentage of cost, realised in comparable uncontrolled transactions. This approach is usually appropriate for creating, assembling, or creating anything else that is sold to an associated party.

*Transactional Net Margin Method*
The comparable earnings technique calculates the arm's-length price using objective measurements of profitability obtained from an uncontrolled taxpayer engaged in identical commercial operations under similar conditions. This approach compares an enterprise's net profit margin relative to an acceptable basis (e.g., expenses, sales, assets) realised in controlled transactions to the net profit margin relative to the same suitable base realised in analogous uncontrolled transactions.

*Transactional Profit Split Method*
The profit split method is calculated by dividing the portion of the common profit (or loss) from a controlled transaction that an independent enterprise would anticipate earning from participating in a comparable uncontrolled transaction among all associated enterprises participating in the transaction. Therefore, both parties may arrive at arm's-length pricing by starting with profit and working backward to price. By comparing the proportionate value of each controlled taxpayer's contribution to the combined operating profit or loss, this approach assesses whether the distribution of the combined operating profit or loss due to one or more controlled transactions is done at arm's length. Any member of a controlled group may receive profits that are not necessarily capped at the organisation's overall operating profit from the relevant commercial activity. As a result, one group member may make a profit while another makes a loss in a given year.

## 25.6 Illicit Financial Flows in Africa's Extractives

Across Africa, IFFs have been an issue since the early 1990s although the exact quantum of funds the continent loses has however been difficult to accurately quantify. However, the consensus among the leading institutions on IFFs-related studies such as the IMF, World Bank, GFI, and OECD suggests that

the continent loses over 50 billion US dollars per annum to IFFs. This figure was however clarified to be an approximated estimation which may not have captured the very secretive forms of IFFs. In reality therefore the actual estimates could be significantly higher. UNCTAD in 2020 pegged Africa's annual loss to IFFs at 88.6 billion US dollars. In the five decades between the 1960s when studies on IFFs-related activities begun and 2010, the GFI estimates that over 1 trillion US dollars have escaped the continent through IFFs (Kar & Cartwright-Smith, 2010).

The extractive sectors of the continent are favourable havens of attraction to foreign investors. This stems from the fact that investments in such sectors are capital intensive, a capacity that clearly eludes the funding spectrum of indigenous African businesses. As foreign investors dominate the ownership and operation of business in these sectors, they explore several illicit avenues to repatriate the huge profits they make so as to evade the payment of taxes to their host countries. In evidence, the top three ranked African countries with the highest incidence of IFFs are South Africa, the DR Congo, and Ethiopia, respectively. To broaden the list further, nine out of the ten highest contributors of IFFs in Africa trace their major export commodities to mineral and oil resources. Whilst South Africa, DR Congo, Botswana, and Zambia's contribution to IFFs comes from their mining sectors, the oil and gas sector accounts for that of Nigeria, the Republic of the Congo, Angola, Sudan, and Cameroon. Indeed, fuel exporting countries were identified to have contributed to about half the total of Africa's IFFs between 1970 and 2008 (Le Billon, 2011; UNCTAD, 2016).

The existence of trade mis-invoicing and transfer mispricing has been upheld with undebatable evidence in many studies such as AU & UNECA 2011, 2012; Kellenberg and Levinson, 2016; OECD, 2014, 2015, 2016a; UNCTAD, 2011, 2013; World Bank, 2016. Contention has however frequently arisen on the methodological approaches by which these different individuals and organisations measure the phenomenon. The GIF, IMF, UNCTAD, and AU & UNECA are notable institutions that have attempted to provide estimates to the value of mis-invoicing and mispricing on the continent, however their results have been conflicting with large variances which makes it difficult to decide which one of them is more accurate.

For instance over the eight-year period from 2000 to 2008, the AU/ECA estimated Africa's trade mis-invoicing to be USD 242 billion which is greater than the estimates provided by the GFI for the same period—USD 162 billion. In consensus, whilst the GFI was explicit in noting that over 80% of Africa's IFFs are generated through trade mis-invoicing, the AU/ECA noted that in terms of the extractive sector, the biggest percentage of mis-invoicing is emitted from Southern African nations with South Africa and Zambia being the biggest culprits. The AU/ECA detailed that between 2000 and 2010, five commodity groups covered up to 56% (i.e. USD 179 billion) of total mis-invoicing from Africa, these are oil (USD 83.4 billion), precious metals (USD 57.2 billion), ores (USD 15.2 billion), copper (USD 12.2 billion), and iron

**Box 25.1 The Case of Gold Trade in Ghana**

Ghana was historically recognized to be adorned with large deposits of gold, a major source of attraction for her colonial masters. From her colonial era, the mineral has been a major component of Ghana's exports. Indeed in 2018, Ghana became the largest producer of gold with an extraction of 4.8 million ounces. Given the value of gold and the quantum that is recorded to be extracted from Ghana's reserves annually, the minute contribution to the country's GDP baffles many minds.

Using 2011 as a base year, Ahene-Codjoe et al. (2022), estimated that Ghana's country's exports of gold from 2011 to 2017 were undervalued by 11% approximately. In current prices, this amounted to about USD 3.8 billion. Cumulatively, an accruing tax revenue of USD 2 billion in constant prices (base year 2011) from the country's export of gold was lost through such undervaluation.

One of the reasons assigned for such undervaluation was the dominance of international mining and trading firms in the sector. To repatriate their incomes, the abnormally high tax rates in Ghana provide these firms with the incentive to under-report their taxable income. Take for instance of a Colorado (USA) mining firm operating in Ghana having to pay a 35% tax whilst back at home it has to pay only 4.5%.

**Source:.....**

and steel (USD 10.9 billion), respectively. It further identified that about 65% of mis-invoicing emanating from Africa's trade in copper comes from Zambia.

Box 25.1 presents a case of trade mis-invoicing from Ghana's extractive sector.

## 25.7 The Effects of Illicit Financial Flows on Africa's Development

Principally, IFFs have continually ripped African states of large portions of legitimately accruing tax revenues. The consequences have hence been dire on their economies, social, political, and environmental space.

Economically, taxes form the biggest revenue base for governments. The conventional shortfall in collected taxes has rendered many countries incapable of domestically financing their budgets. The constant reliance on foreign budgetary support has deepened the indebtedness of African states, hence exposing them to high risk of default. The net effect is that African states are kept in a cycle of indebtedness and the already volatile economies are further exposed to negative balance of payment issues, depreciating exchange rates, and high inflation rates. Additionally, various studies on Sub-Saharan African countries reveal that IFFs are a disincentive to savings which in turn reduces the capital formulation capacity of these countries. The menace is as well proven to crowd

out domestic investment in the region (Afolabi, 2022; Cobham & Janský, 2020; UNCTAD & UNODC, 2020).

Socially, once countries are unable to generate enough revenue, the provision of social infrastructures suffers. Roads and transportation networks are left undeveloped, hence inhibiting the facilitation of trade. Many are unable to access health care services because such facilities are either lacking or where few are provided, overcrowding is inevitable. UNCTAD's Economic Development in Africa Report 2020 indicates that comparatively in African countries where IFFs are highly prevalent, governments turn to expend 25% less on the provision of health services than those with low incidence of IFFs. Similarly, the provision of education infrastructure and services in IFFs endemic countries suffers a 58% less budgetary allocation than in countries with lower IFFs occurrence.

The report further suggests that women and girls bear the most consequences of governments' inability to provide essential public goods as a result of the funding gap that IFFs create. This is because they are usually the ones that would have less or no access to education and health. For instance in the case of Sierra Leone, where under-five mortality rates rank among the highest on the continent (105 per 1000 live births in 2018), it was identified that if IFFs could be significantly curtailed, so that the accruing revenues are invested in developing their public health systems, an additional 2322 of the 258,000 child births could be saved annually. In 2022, UNESCO estimated that in Burkina Faso, Chad, Mali, and Niger, more than half (52%) of all children and adolescents do not have access to education. Also, 98 million children between the ages of 6 and 18 are out of school in Sub-Saharan Africa. A major causal factor is the lack of access. Indeed, revenues lost to IFFs could be channelled into the development of such infrastructures. Generally, the provision of public goods drastically reduces as governments are unable to mobilise adequate revenue to finance them.

Politically, IFFs weaken governance systems. African countries are conventionally challenged in their capacity to resource state institutions and government machineries to function optimally. IFFs also breed a vicious cycle of corruption that enables politicians to unduly utilise state resources to enhance their electoral fortunes so they can retain power and perpetuate their rule. The availability of such resources to incumbent governments fuels their attempt to disenfranchise their political opponents or circumvent election processes and results in their favour. This is a common phenomenon in African countries and has severally caused electioneering disputes which degenerate into violent civil unrest, hence a politically unstable environment (AU and UNECA, 2011).

External forces equally capitalise on certain types of IFFs (commonly in the case of money laundering and illicit fire arms trade) to purposefully instigate and fuel terrorism and activities of militant groups. Usually the motive is to specifically disrupt targeted governance regimes. Indeed, the frequency and severity of such activities in a number of countries across the continent have

succeeded in toppling civilian governments and prompting military coup d'états (AU & UNECA, 2011).

From an environmental perspective, the ease and multiplicity of avenues to perpetuate IFFs coupled with the high-profit prospects of the continents' extractive sector continue to draw investors who overly exploit these resources leaving the environment badly degraded. The consequent effect on climate change and arable lands is undebatable. With Ghana, for instance, being the largest producer of gold in Africa, the operations of illegal small-scale mining (locally known as "galamsey") has terribly contaminated several of the country's major river bodies and degraded large scales of cultivable lands. In one of the most endemic regions (Western Region) the Ministry of Lands and Natural Resources evaluated that it would cost about 250 million USD to reclaim such lands and river bodies. In Guinea, the Mount Nimba Biosphere Reserve, a World Heritage Site that was preserved for decades, was downsized by 1550 ha to allow for iron-ore prospecting.

After evaluating Africa economy in 2020, the United Nations Conference on Trade and Development precisely stated that the pervasiveness of IFFs within Africa's extractive industries generates negative environmental outcomes. Keeping under control the perpetuation of IFFs could free up about 50% of the needed $2.4 trillion for climate change adaptation and mitigation across Sub-Saharan Africa.

IFFs impede international cooperation for development. The loss of funds from the continent retards the progress of inter country alliances such the AU and ECOWAS whose primary objectives are to "Achieve greater unity and solidarity between African countries and the peoples of Africa" and "to promote economic cooperation among member states in order to raise living standards and promote economic development", respectively. Africa failed to meet the targets of the UN's Millennium Development Goals in 2015 and current evidence is suggestive that they are likely not to meet the SDGs by 2030. A major causal factor has been traced to the fact that the efforts and successes of these organisations are frittered away by IFFs-related activities.

In addition to funding that member countries receive from regional organisations, Africa receives huge sums of development assistance from the international community annually to aid in the pursuit of economic growth, develop social infrastructures, build robust security systems, and project in general human rights and dignity. Ironically, perpetrators of IFFs leverage on the development of these systems to intensify their illegal activities. The OECD's 2018 and UNCTAD's 2020 economic report on Africa provides evidence to the effect that the expansion of liberalised trade in Africa as well as its advancement in technological development correlates positively with IFFs over the continent. Implicitly the continuous evolvement of IFFs activities to penetrate limiting mechanisms poses major threats to the sustenance of global partnerships for development.

## 25.8 How to Curb Trade Mis-invoicing and Transfer Mispricing

Curbing trade mis-invoicing and transfer mispricing would involve mitigating corruption, investing in technological infrastructures, implementing tax reforms, building capacity, and harmonising commodity descriptions and coding system.

### *25.8.1 Mitigate Corruption*

Arguably as the core foundation of IFFs, both as a source and a type, corruption must be reduced to its barest minimum if any progress in curbing IFFs is to be achieved. The successful orchestration of trade mis-invoicing and transfer mispricing hinges on the collaborative efforts between tax authorities, law enforcement agencies, businesses and importantly political authorities. These persons easily trade their integrity, ethics and professional standards for selfish gains. The human greed to amass wealth would constantly undermine efforts to curb the various forms of IFFs. A committed socio-political effort is critically needed from all African states to combat the root of corruption.

### *25.8.2 Investing in Technological Infrastructures*

Establishment of extensive data management systems in African trade partners countries to gather, store, and process accurate trade data in real time is fundamental to minimise the likelihood of transfer mispricing and trade mis-invoicing. Synchronising such data systems is equally paramount to enable timely and easy exchange of information on exports and imports between the various countries. Only by leveraging on current information and communication technologies can this be efficiently achieved.

### *25.8.3 Implementing Tax Reforms*

Transfer mispricing and trade mis-invoicing are primarily premised on the desire to evade tax. Indeed businesses often complain that tax systems in Africa are complex and difficult to comply with. They frequently query the mechanisms policy makers adopt to leverage tax rates as these rates are deemed to be very high, and as well bemoan the justifications for exempting certain categories of businesses from taxes. Tax compliance essentially rests on the extent to which the tax resonates with the tax payers, that is why it is important that the processes involved in levying any tax is widely consultative of the principal stakeholders. Given the level of discontent among businesses for which reason some engage in dubious means to evade taxes when transferring their funds, it is incumbent on individual states to review and restructure their tax administration system when necessary. Collectively, African states must endeavour to harmonise the tax administration systems at their borders so that facilitation of goods across these borders would be less cumbersome and tax compliance would increase.

### *25.8.4 Building Capacity*

Trade mis-invoicing and transfer mispricing are anchored on carefully designed strategies which need specialised skills to detect. The reality however is that these skills are conspicuously lacking among tax administrative officials. Generally, it is either few people have been trained to handle such matters with some becoming rusty on their knowledge or they just do not have the knowledge at all. Frequent skills training is necessary for both tax officials and law enforcement agencies to keep them in constant tune with the laws on trade mis-invoicing and transfer mispricing, how to detect them and the procedures to deal with them.

In addition, institutions responsible for collecting taxes must be reinforced with sufficient funding. It is often the case that majority of tax administration institutions across the continent improvise in several ways as there are logistical constraints. The inefficiencies generated cannot be overly emphasised. The performance of these institutions is far below the desired levels; hence tax collection frequently falls short of actual targets. For optimal results, provision of the necessary resources and logistics must be prioritised.

Conventionally, custom officers are oriented to evaluate goods transiting their jurisdiction, charge accordingly, and then collect the appropriate taxes. This monotonous way of thinking continues to dominate the expertise of majority of these officers, for which reason issues of IFFs and for that matter mis-invoicing and mispricing may not necessarily resonate with their understanding. This provides a justifiable basis for African countries to institute continuous development programmes for their custom officers to upgrade their skills and keep in tune with the evolving nature of trade-related fraud activities particularly those that are associated with goods routed through their borders.

Additionally, the detection and control of mis-invoicing and mispricing should be incorporated into the mandate of custom officers, in that way their mind set would be reoriented to understand that such a function has become a part of their daily routines.

### *25.8.5 Harmonising Commodity Descriptions and Coding System*

It would be of enormous benefit if African countries opt to homogenise the Commodity Descriptions and Coding System so that the entire continent comes to operate under a common platform. Essentially this will eliminate the dynamics that the different countries apply to classifying their export product and rather provide an easy understanding of a unified classification system. Additionally, trade mis-invoicing that is usually traced to commodity misclassification could be significantly reduced. Again this would facilitate real-time exchange of information on customs invoicing between the country of export and import.

## 25.9 Conclusion

Trade mis-invoicing and transfer mispricing are empirically identified to be the biggest channels of IFFs from Africa. This has been the by-product of the continent's liberalisation of trade with its external trading partners. Evidence from data available shows that incidence of trade mis-invoicing and transfer mispricing across Africa and accordingly the quantum of funds being lost have increased from the 1980s when many African countries begun to relax their trade terms with countries mainly from Europe and Asia. The extractive sector has remained the most susceptible sector for trade mis-invoicing and transfer mispricing, constituting the highest percentage of total trade mis-invoicing and transfer mispricing recorded across Africa. Indeed the continents' top 10 IFFs emitting countries have the biggest component of their IFFs traced to trade mis-invoicing and transfer mispricing from the extractive sectors. Whilst South Africa, DR Congo, Botswana, and Zambia realise theirs from their mining sectors, that of Nigeria, the Republic of Congo, Angola, Sudan, and Cameroon comes from their oil and gas sectors.

Given the secretive and complex nature of trade mis-invoicing and transfer mispricing, a single universally accepted approach to measuring the exact quantum of commodities and funds the continent losses is yet to be found. Although a number of methods have been postulated, the inherent weakness of each renders their estimations questionable.

Despite the devastating impacts that IFFs wreaks on Africa's socio-economic development, the pervasiveness of the menace is still buoyed by factors inclusive of corruption, high corporate tax rates, under resourced law enforcement and regulatory institution and their lack of the needed expertise to detect such incidence. Addressing these issues hence is not only critical to curbing trade mis-invoicing and transfer mispricing but also a means to engineer Africa's organic growth through enhanced domestic revenue mobilisation which would reduce the continents dependence on foreign aid. Among other measures, addressing trade mis-invoicing and transfer mispricing would require mitigating corruption, investing in technological infrastructures, implementing tax reforms, building capacity, and harmonising commodity descriptions and coding system.

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M. K. Ocran, J. Y. Abor (eds.), *The Palgrave Handbook of International Trade and Development in Africa*,
https://doi.org/10.1007/978-3-031-65715-3

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